

# 2008 University of the Virgin Islands Extension Annual Report of Accomplishments and Results

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## I. Report Overview

### 1. Executive Summary

The Virgin Islands Cooperative Extension Service accomplished most of the objectives and goals that were outlined in the 14 programs that were developed as a result of the five-year plan of work. The trainings, workshops, seminars, demonstrations, shortcourses, and educational activities accomplished this year positively impacted and changed the lives of many Virgin Islanders. This summary is grouped under the four main areas of the Cooperative Extension System: Agriculture, Natural Resources, 4-H Youth Development, and Family & Consumer Sciences.

The Beef, Dairy and Small Livestock Program conducted a series of workshops and demonstrations for small livestock farmers in the Virgin Islands on the proper method of detecting internal parasite infestations in their herds and the proper way of isolating animals affected and treating these specific animals by using the FAMACHA method. Ninety-two percent of farmers who received the trainings reported being able to utilize the methods; thereby, increasing the productivity of their animals, and also reducing animal losses due to tick infestation. These farmers also reported a savings of \$330 per farm. Considering the number of livestock farmers who utilized the system, a total of \$8,910 was saved by livestock farmers in the Virgin Islands.

About 70% of swine producers after attending a series of trainings on using recommended swine facilities adopted the recommendations in their swine operations and increased productivity by increasing the number of animals weaned on their farm and thereby increasing their farm income by \$275 per farm.

The Sustainable Agriculture Program this year trained farmers on using proper irrigation systems and also provided farmers with practices to enhance water use efficiency. About 5-7% of farmers utilized the recommended techniques and increased their crop production and their profitability. This has provided more produce for the weekly farmers' market and residents have begun purchasing a lot of locally produced farm products.

In the Urban Forestry Program, CES staff took part in an effort to create and rewrite a tree ordinance that assisted the community in providing a legal framework for the management of public and private trees and tree communities in the Virgin Islands. This was a success story where CES was able to assist the Department of Public Works in educating the Virgin Islands public in addressing concerns of the community in the removal of some trees from our public roadways. CES staff also provided recommendations for the selection of future trees and the management of existing trees around the public roads. Radio shows were conducted to better educate the public about tree assessment and management. This calmed the nerves of the public about the controversy of the removal of trees in the Virgin Islands.

With the rising cost of food in the local economy, the Urban Gardening Program assisted local residents in creating their own small backyard gardens where they planted home usable crops that reduced their food purchases. The promotion of urban gardening in the community has stirred the interest of many residents living in community housing projects and apartments, encouraging them to develop gardens that reduce their food purchases. This program trained 215 adults in methods of reducing their food budgets through urban gardening. This program also assisted in the recycling of old car tires that has become a problem in our local landfill. Program participants were taught how to use these tires as containers for planting vegetables and green leafy crops.

The Natural Resource and Environmental Management Program facilitated the interaction of community groups and leaders to address resource, conservation and management issues, pollution prevention and the establishment of an eco-tourism industry based on the incorporation of the Virgin Islands natural and cultural history and low impact tourism concepts. This program has assisted in promoting the island of St. Croix as an eco-tourism destination and has increased visitors to the island by 25%, increasing economic development activities on the island.

The Water Quality Program focused on transmitting information on water quality protection and least toxic household projects to the respective audiences so convincingly so that 92% of the participants in the program indicated that they would stop using hazardous products. This program also assisted residents in safeguarding and testing their cistern water for bacteria contamination and treating the cistern to make their household water safe for drinking and for use in other activities. A major training on on-site wastewater management was conducted for Extension and personnel from the local Department of Agriculture and the Department of Planning and Natural Resources to assist the trainers to help the community in the development of safe septic systems. CES also promoted the implementation of best management practices to protect water quality at coastal public parks, hotels, and large subdivisions with extensive coastal and offshore resources.

The youth development area the programs include 4-H Summer Camps, 4-H Volunteer Development and Management and 4-H/Youth Development. The annual summer camp drew students from the two districts to a six-week program enrolling 265 youths and employing 60 teachers, high school and college students. This was an increase of 22% over last year's enrollment. In addition to special programs in cultural heritage, agriculture, science, and entrepreneurship, campers received healthy lifestyle training resulting in a 30% increase in those who reported eating breakfast daily, 75% reported that they watched less television and increased play time and all campers indicated that they will enroll again next year. All summer camp staff received training on teamwork, leadership, working with multi-age groups and experiential learning strategies. The 4-H Volunteer Development and Management Program continues to recruit and develop volunteers to lead and establish 4-H clubs in the community. During the year, one school-based club and three community-based 4-H clubs were established on the island of St. Croix and two clubs were established in the St. Thomas/St. John district. On St. Thomas, with the assistance of volunteers, 35 youths formed a special-interest group as part of

the 4-H carnival troupe and won first place in the carnival activity. In the Family and Consumer Sciences area programs were conducted in Marketable Skills for Limited Resource Families and Computer Training and Technology. The Marketable Skills program provided information through workshops, shortcourse and seminars to unemployed persons trying to enter the job market. The program conducted workshops and shortcourses that helped low-income at-risk audiences build knowledge, skills, and attitude that positively improved their quality of life. A total of 26 program participants that attended the six-week shortcourse gained employment. Seventeen persons that enrolled in the six-week clothing construction shortcourse reported an increase in personal income. At the closing ceremony, two of the clientele that graduated reported creating a home-based business from knowledge and skills gained from participating in this program. Six of the clientele who received computer literacy training reported that they used this skill to gain employment in the local workforce.

The nutrition programs consisted of Basic Food Safety Education, EFNEP and EFNEP Youth, and a Healthy Well-Nourished Population. The Food Safety Program targeted local food vendors and others who sell food at different cultural activities and public events in the Virgin Islands. Educational materials and training were provided to these vendors to assist them in providing a safe and quality product for the public. Of the 16 vendors attending the training, 95% reported adopting food safety measures such as using heaters and sealed containers for keeping their food warm and safe from the environment. They also said they are not serving food and exchanging money at the same time. A tropical fruit poster was also produced and distributed throughout the territory. This poster utilizes a five-star scale to indicate the amount of potassium, fiber content and vitamin C in each of the local tropical fruits. During the fiscal year, a total of 300 posters were distributed to various individuals and organizations. A six-week nutrition education class was conducted to assist the general public in understanding the causes of diseases such as heart disease, cancer, cerebral vascular disease and diabetes. Seventy-five percent of the participants reported a positive change after attending the classes in adopting at least one healthy lifestyle practice. These practices included increase consumption of fruits, vegetables, milk, and grain groups. The EFNEP program continues to target low-income at-risk clientele and Food Stamp participants. A total of 80 EFNEP clientele reported adopting the practices of buying high quality nutritional foods, budgeting, plan meals, and safe food preparation. This program also provided information to 32 young people teaching them how to select and prepare nutritional diet, and to select different foods to avoid obesity.

CES continued its international programs by providing leadership and assistance to other countries in the Eastern Caribbean region. Professional linkages were maintained with five agricultural organizations in the Eastern Caribbean. A total of 11 persons including students, professors and volunteers, attended a five-day training on program planning and evaluation, leadership skills, and cultural exchange. CES extension specialists provided training on sustainable agriculture, livestock production and management and water quality to agents in the island of Tortola. Forty-two purebred boar goats were exported to four islands through our breeders exchange program to assist local livestock farmers in these island improve their breeding stock. This generated a profitable income for livestock producers in the Virgin Islands. CES assisted in the planning and execution of two international meetings of the Caribbean Food Crops Society (CFCS) and the Caribbean Council of Higher Education in Agriculture (CACHE).

**Total Actual Amount of professional FTEs/SYs for this State**

Year:2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	21.9	0.0	0.0	0.0
<b>Actual</b>	30.5	0.0	0.0	0.0

**II. Merit Review Process**

**1. The Merit Review Process that was Employed for this year**

- Combined External and Internal University External Non-University Panel

**2. Brief Explanation**

The programs that were developed by agents and specialists were sent to the state Program Leaders for their review, input, approval and were then submitted to the Associate Director for his input and budget allocation. After the Associate Director approved the programs, they were sent to the State Director for his review and approval. The programs were then forwarded to the Vice Provost for Research and Public Service and the University's Office of Sponsored Programs for comments and approval. The programs that were accepted were then forwarded to the Extension Advisory Council for its input and approval. Approved programs were shared with specific Commissioners for their comments and inputs. The final programs were sent to the State Director for final approval and implementation.

**III. Stakeholder Input**

**1. Actions taken to seek stakeholder input that encouraged their participation**

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals
- Survey of the general public
- Survey specifically with non-traditional groups

#### **Brief Explanation**

CES encouraged participation by the general public by announcing all its public meetings, listening sessions and town hall meetings through the local radio stations, television stations, and two local newspapers. Information was also sent to the UVI Public Information Specialist for distribution to the general UVI community and the general public bulletin board. Invitations were also sent to various farmers' groups such as St. Croix Farmers Cooperative, We Grow Food Inc., and St. Croix Farmers in Action to encourage their members to participate in all extension programs and activities. Invitations were also sent to individuals who had attended any programs or activities conducted by CES or had contact with a specialist or agent, to participate in extension programs and activities. Volunteer groups, homemakers club, and other focus groups were sent special invitation to participate in extension program activities.

#### **2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them**

##### **1. Method to identify individuals and groups**

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups
- Open Listening Sessions
- Needs Assessments
- Use Surveys

#### **Brief Explanation**

Input was received from the CES Advisory Council and the Virgin Islands Farmers Cooperative. Input was also received from the Advisory Council of the Research and Public Service. A needs assessment was conducted on CES clientele. CES evaluated its programs by giving participants of all seminars, meetings, and workshops survey forms to complete. Farm and clientele visits were made to determine the impact of the programs and suggestions made by clientele, were recorded and used to make improvements in CES educational programs and activities. CES conducted listening sessions and public meetings that were used to upgrade programs. These listening sessions and program activities were advertised through local newspapers, the University's Research and Public Service Newsletter, and the local television and radio stations.

#### **2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them**

##### **1. Methods for collecting Stakeholder Input**

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Survey of the general public
- Survey specifically with non-traditional groups
- Meeting with invited selected individuals from the general public

**Brief Explanation**

CES collected information and recommendations from its stakeholders at the Advisory Council's summer meeting. The Research and Public Service Advisory Council also provided recommendations for CES. Surveys of CES stakeholders were conducted by program staff during CES programming to get stakeholders involvement in setting priorities and addressing emerging issues in the community. CES held two general public meetings where information was advertised on the local radio stations, televisions, and newspapers to ensure that the Virgin Islands population has an equal chance of recording their concerns. This enabled CES to upgrade its programs and ensure that community needs were met.

**3. A statement of how the input was considered**

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- In the Action Plans
- To Set Priorities

**Brief Explanation**

Stakeholders' input was considered in the budget allocation of programs. Stakeholders' involvement helped CES in setting its priorities and addressing emerging issues in the community. During the year, CES strengthen its collaboration with the Virgin Islands Departments of Agriculture, Health, Labor, Education, Human Services, the Virgin Islands Housing Authority, and the Office of the Governor in addressing at-risk issues in the community. Stakeholders' input was also used in redirecting extension programs.

**Brief Explanation of what you learned from your Stakeholders**

CES stakeholders assisted the Extension Service in focusing on the needs of the community and also helped in focusing CES' activities on emerging issues. They enhanced CES programs and increased the number of participation in CES programs.

**IV. Expenditure Summary**

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
856904	0	0	0

<b>2. Totaled Actual dollars from Planned Programs Inputs</b>				
<b>Extension</b>			<b>Research</b>	
	<b>Smith-Lever 3b &amp; 3c</b>	<b>1890 Extension</b>	<b>Hatch</b>	<b>Evans-Allen</b>
<b>Actual Formula</b>	856904	0	0	0
<b>Actual Matching</b>	961000	0	0	0
<b>Actual All Other</b>	240746	0	0	0
<b>Total Actual Expended</b>	2058650	0	0	0

<b>3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous years</b>				
<b>Carryover</b>	0	0	0	0



**Program #1**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Beef, Dairy and Small Livestock

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	10%			
302	Nutrient Utilization in Animals	15%			
307	Animal Management Systems	35%			
311	Animal Diseases	10%			
312	External Parasites and Pests of Animals	10%			
315	Animal Welfare/Well-Being and Protection	15%			
603	Market Economics	5%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.0	0.0	0.0	0.0
<b>Actual</b>	2.4	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
90000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
90000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

- A livestock brand registry was maintained to assist farmers and livestock agencies in identifying lost or stray livestock.
- A "Locally Produced" program was started to promote the purchase and consumption of locally produced animal products.
- A parasite monitoring program was continued for all livestock farms to document parasite populations and concentrations, with data being used in tick control and internal parasites program.
- A program was initiated to demonstrate to producers the health and financial advantages of proper and adequate housing for livestock
- Methods of nutrition evaluation was demonstrated to producers so that they can determine effects on reproduction and performance

**2. Brief description of the target audience**

- Virgin Islands livestock producers
- Virgin Islands consumers
- Virgin Islands youth

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	350	4000	400	500
2008	370	4200	385	510

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Workshops/demonstrations would be conducted on management, nutrition, housing, and identification of livestock

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	4	4

**Output #2****Output Measure**

- Pasture testing and demonstration sites would be set up for forage evaluation

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	2	0

**Output #3****Output Measure**

- Farms would be visited for general evaluation of management techniques and counseling

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	150	110

**Output #4****Output Measure**

- Farms would be visited for parasite monitoring and evaluation

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	25	25

**Output #5****Output Measure**

- Animals would be weighed to monitor performance

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	10	10

**Output #6****Output Measure**

- Animal production would be monitored

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	24	24

**Output #7****Output Measure**

- Develop a "Buy Local" campaign with local farmers cooperative for use by producers in the community

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**Output #8****Output Measure**

- Provide training per year to farmers in identification methods

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Continue to work toward developing and adopting the use of two drought-resistant and nutritional forages for pastured livestock per year
2	Increase weaning weights of calves in beef herds by 20 pounds
3	Decrease production, performance and animal losses due to parasites and poor nutrition by 5% per year
4	Increase the sales and consumption of locally produced livestock products such as meat, milk, eggs
5	Increase the number of livestock herds/flocks using complete identification and recordkeeping practices
6	Increase the number of pig farmers that are raising their livestock in recommended facilities

**Outcome #1**

**1. Outcome Measures**

Continue to work toward developing and adopting the use of two drought-resistant and nutritional forages for pastured livestock per year

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	2	2

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Farmers (livestock producers) are directly affected by feed shortages due to drought conditions because they need to purchase expensive supplemental feeds. These farmers would like to decrease their expenses for supplemental feed, increase production, and decrease erosion; policy makers, agricultural agencies, government agencies, community groups need to see an increase in the availability of local meat products and also an increase in the aesthetics of the island.

**What has been done**

Seed suppliers were contacted, meetings were conducted with farmers and partners, and seed samples were obtained.

**Results**

Work is ongoing

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
315	Animal Welfare/Well-Being and Protection
312	External Parasites and Pests of Animals

**Outcome #2**

**1. Outcome Measures**

Increase weaning weights of calves in beef herds by 20 pounds

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	4	4

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Farmers producing heavier calves at weaning can market the animals sooner thus allowing a faster turnover in their herds and less time and money spent on each animal, therefore, increasing profits. Beef producers need to increase profitability of their farm by increasing the weight of calves produced. Buyers prefer larger, yet younger animals, because the meat is more tender.

#### What has been done

Calves were weighed periodically and weights recorded.

#### Results

Have achieved maximum size

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
315	Animal Welfare/Well-Being and Protection
307	Animal Management Systems
312	External Parasites and Pests of Animals

### Outcome #3

#### 1. Outcome Measures

Decrease production, performance and animal losses due to parasites and poor nutrition by 5% per year

#### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	5

#### 3c. Qualitative Outcome or Impact Statement

##### Issue (Who cares and Why)

Livestock producers know that the cost per animal increases when the number of animals decreases. Parasites and poor nutrition causes an increase in the cost of medications and feed. Unthrifty animals are not as marketable and are slower growing. Livestock producers and processors need to decrease the costs in medication and feed, and increase the revenue from the meat produced. Consumers expect an increase in quality and quantity of consumable meat made available to them.

##### What has been done

Periodic wormings, condition monitoring and testing

##### Results

Some resistance seen to commonly used wormers. Continued use of FAMACHA method decreased the amount of wormer used; therefore, the cost per farmer was also reduced.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
302	Nutrient Utilization in Animals
315	Animal Welfare/Well-Being and Protection
312	External Parasites and Pests of Animals

### Outcome #4

**1. Outcome Measures**

Increase the sales and consumption of locally produced livestock products such as meat, milk, eggs

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	5	5

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

For the livestock producers, more sales equal more money. For the consumers it means fresher and healthier products. The availability of local products leads to a healthier diet; therefore, healthier life. Producers and consumers need to increase income from sale of locally produced meat products and increase the number of healthy local products available for purchase.

**What has been done**

Program is ongoing

**Results**

Two additional egg producers and two meat producers have been successful in selling their products.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
603	Market Economics

**Outcome #5****1. Outcome Measures**

Increase the number of livestock herds/flocks using complete identification and recordkeeping practices

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	10	5

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Livestock producers can manage herds/flocks better with all animals identified, thus simplifying reproduction and feeding management. Identified animals can be recognized and recovered when lost or stolen. Public and government officials can trace lost, strayed or impounded animals to protect general population health and well-being.

**What has been done**

Assisted farmers with tagging

**Results**

Because of educational programs, farmers are obtaining their own tagging equipment to maintain identification of their flocks.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
307	Animal Management Systems

**Outcome #6**

**1. Outcome Measures**

Increase the number of pig farmers that are raising their livestock in recommended facilities

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	10	1

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Livestock farmers need the proper facilities for rearing healthier animals which will increase sales, reduce money spent on health care, and increase profit. Also, public and government officials would like to see less pollution and contamination of the environment and a healthier community.

**What has been done**

Workshop and training

**Results**

One farmer completed recommended housing for his swine production.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
307	Animal Management Systems

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities

**Brief Explanation**

## **V(I). Planned Program (Evaluation Studies and Data Collection)**

### **1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

### **Evaluation Results**

### **Key Items of Evaluation**

**Program #2**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Sustainable Agriculture

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	20%			
205	Plant Management Systems	20%			
307	Animal Management Systems	20%			
403	Waste Disposal, Recycling, and Reuse	20%			
601	Economics of Agricultural Production and Farm Management	20%			
<b>Total</b>		100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.7	0.0	0.0	0.0
<b>Actual</b>	3.1	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
60000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
60000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
58000	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Shortcourses, workshops, and demonstrations were conducted to disseminate information about recommended, research based sustainable production practices, including drip irrigation. Announcements were made through the print and electronic media to promote educational activities and disseminate information about sustainable agricultural practices. Farm visits and telephone contacts were made to address clientele problems and to disseminate information about the program. Workshops and other projects were conducted in partnership with other entities to implement strategies to increase farm water supply and enhance the efficient use of this resource.

**2. Brief description of the target audience**

The program's general target audience consisted of crop and livestock producers, outreach professionals from government and academic institutions, students, and young adults who aspire to be farmers. The primary audience was farmers who are typically socially disadvantaged, limited resource individuals who lack the necessary technical training, technological tools, and infrastructure for optimum farm production.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	300	7000	1500	700
2008	414	5000	200	500

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

**Year    Target**

**Plan:**    0

2008 :    0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of shortcourses, workshops, demonstrations, annual fairs and exhibits

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	10	13

**Output #2**

**Output Measure**

- Number of publications

*Not reporting on this Output for this Annual Report*

**Output #3**

**Output Measure**

- Number of announcements through print and electronic media

*Not reporting on this Output for this Annual Report*

**Output #4**

**Output Measure**

- Number of farm visits and telephone contacts

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	120	100

**Output #5**

**Output Measure**

- Projects to increase farm water supply and water use efficiency

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Increased number of farmers who use sustainable agriculture practices
2	Increased number of sustainable agriculture practices conducted by individual producers
3	Increase in the number of farmers who utilize value added strategies
4	Increase in water resources for producers and adoption of practices to enhance water use efficiency
5	Increase in the number of farmers who conduct or enhance record keeping practices

**Outcome #1****1. Outcome Measures**

Increased number of farmers who use sustainable agriculture practices

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	10	15

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

As the cost of inputs increases, farmers will have to manage their operations in the most efficient manner. Island living poses some unique environmental characteristics. All production practices must take into account the unique environment that surrounds most farm operations. Erosion, aquifer contamination, pollution of the ocean are among the potential problems if farmers aren't utilizing practices that ensure the longevity of their operation.

**What has been done**

Through a series of seminars and workshops, crop and livestock farmers and other agriculture professionals were educated and informed of the current best management practices. These educational opportunities included theoretical as well as practical approaches in making their operations sustainable.

**Results**

Overall, ninety (90%) of participants in the seminars reported an increased awareness of practices that would help them to make sound production decisions that would ensure sustainability. More than sixty percent (60%) of the participants plan to seek further information on sustainable crop and livestock production practices.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
307	Animal Management Systems
205	Plant Management Systems
403	Waste Disposal, Recycling, and Reuse
111	Conservation and Efficient Use of Water
601	Economics of Agricultural Production and Farm Management

**Outcome #2****1. Outcome Measures**

Increased number of sustainable agriculture practices conducted by individual producers

*Not reporting on this Outcome for this Annual Report*

**Outcome #3****1. Outcome Measures**

Increase in the number of farmers who utilize value added strategies

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	5	5

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Because of seasonal surplus of some crops, and/or the inability to sell all of the crops or livestock, farmers at times have difficulty deciding what to do with the surplus. They have several options including dumping, giving it away, composting, or adding value to the product and sell it in a different form. The latter has the potential of increasing the overall income of farmers. It also brings to the market place more choices for the consumer.

**What has been done**

Each year an annual event is held that usually features a fruit, vegetable, and livestock. Seminars are conducted on the care, culture, and production practices of each commodity. Along with the production seminar, there is usually a class in which participants witness post-harvest processing and handling such as cooking, drink making, baking, preserving and drying of one or more of the featured commodities. Information (recipes, processing procedures) was also provided to participants to take home and try at their own convenience.

**Results**

Of the number of individuals that participated in any of the events or sought information from staff, approximately twenty-five 25% have actively begun to utilize value-added strategies to reduce waste and increase profitability. A smaller percentage has increased the number of value-added products they have brought to the market place in the past.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
205	Plant Management Systems
601	Economics of Agricultural Production and Farm Management
111	Conservation and Efficient Use of Water
307	Animal Management Systems

**Outcome #4**

**1. Outcome Measures**

Increase in water resources for producers and adoption of practices to enhance water use efficiency

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	25	5

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Of all the constraints and limitations to farming in the territory, insufficient supplies of supplemental water and erratic rainfall patterns make crop production and animal husbandry a challenge. Water conservation and efficient distribution are key elements in farm management practices. Accessible sources of supplemental water are also vitally important to the successful operation of the farm.

**What has been done**

Municipal authorities constructed a large dam and made available for purchase to farmers, water storage containers. Through public education events and one-on-one contacts farmers were encouraged to use current irrigation technologies and other water conservation strategies.

**Results**

Approximately five to seven percent (5-7%) of farmers have begun to utilize the newly created water source. A similar percentage is now using current water saving irrigation technology or has enhanced or augmented their existing irrigation capacity. A much lower percentage (2-3%) has taken advantage of the water storage containers to increase their supplemental water capacity. An education campaign within the agriculture community may need to be undertaken to increase the number of farmers taking advantage of this offer.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
307	Animal Management Systems
111	Conservation and Efficient Use of Water
205	Plant Management Systems

**Outcome #5****1. Outcome Measures**

Increase in the number of farmers who conduct or enhance record keeping practices

*Not reporting on this Outcome for this Annual Report*

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)

**Evaluation Results**

Post seminar tests were conducted in some of the instruction classes in order to measure increase in knowledge, and behavioral changes. Some data was obtained from verbal responses to a series of questions designed to extract knowledge levels, attitudes, as well as past and short-term future (three months) behavioral changes. There is a need to develop instruments that will provide information on long-term behavioral changes.

**Key Items of Evaluation**

**Program #3**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Natural Resources and Environmental Management

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	20%			
123	Management and Sustainability of Forest Resources	25%			
125	Agroforestry	10%			
134	Outdoor Recreation	25%			
136	Conservation of Biological Diversity	10%			
605	Natural Resource and Environmental Economics	10%			
<b>Total</b>		100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.8	0.0	0.0	0.0
<b>Actual</b>	2.8	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c 75562	1890 Extension 0	Hatch 0	Evans-Allen 0
<b>1862 Matching</b> 80000	<b>1890 Matching</b> 0	<b>1862 Matching</b> 0	<b>1890 Matching</b> 0
<b>1862 All Other</b> 0	<b>1890 All Other</b> 0	<b>1862 All Other</b> 0	<b>1890 All Other</b> 0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

The NREM Program continued to work closely with the Magens Bay Authority (MBA) to promote the development of a comprehensive master plan for Magens Bay resulting in the issuing of an RFP by MBA to accomplish this goal. The Estate Adventure Trail plans progressed to the Phase II stage to be funded through collaboration with NRCS (RC&D) and the VI Department of Agriculture Urban and Community Assistance Program. Technical assistance with habitat protection and restoration plans/procedures has also been requested by managers to restore and/or protect other critical habitats, areas of particular concern in the territory, and areas designated as part of the VI Territorial Park initiative established by the Legislature of the VI including Smith Bay Park, Southgate Park, Great Bay, Annaly Bay and others. Similar technical assistance has been provided to developers and property owners. Some of these privately-owned sites exceed 300 acres and encompass varied threatened habitats and unique natural resources. Attempts have been made through informal contacts to document and build upon indigenous knowledge and practices. Materials, displays, workshops, presentations and demonstration sites that relay information regarding native plants, ecosystems and habitats; naturalized, exotic, endangered and threatened plant species; urban forestry and other resource conservation issues were developed and maintained. The St. Croix Environmental Repository established with EPA funding increased in size and is used by the public. The main media outlets used to promote NREM issues were radio and television PSAs, television video spots, local talk shows (radio & TV), presentations and newspaper articles. The CDC/CES book *Island Peaks to Coral Reefs* and *The Remarkable Big Trees of the Virgin Islands* tree book co-researched by CES, in its second printing, was distributed to over 40 VI librarians during a EPSCoR-sponsored training session to provide educators with information about how to use the book for teaching how land and sea physically and biologically connected in the VI. This publication was also used by the UVI Master of Marine and Environmental Management program, Yale University's environmental management graduate program, and University of Kansas' biodiversity and the law program. Upon request, native plant inventories and identifications were made and tours and site visits were conducted for resource managers, government agencies, regulatory personnel, researchers, developers, hotels, educators, students, property owners and others during office consultations and site visits. During consultations and advisory committee meetings, technical information was also provided about exotic, invasive, endangered and threatened, medicinal plant species, land management and planning. Researchers were assisted with the selection of native plants for natural products research. Through fairs, meetings and tours the NREM program helped facilitate the interaction of community groups and leaders to address natural resource conservation and management issues, pollution prevention, and the establishment of an ecotourism industry based on the incorporation of VI natural and cultural history and low-impact tourism concepts.

**2. Brief description of the target audience**

- Policy-makers and regulatory personnel, community groups, teachers and students, business community, non-governmental organizations, and the general public.
- Those charged with managing public recreation areas including the Magens Bay Authority, VI Territorial Park Advisory Committee, St. Croix East End Marine Park Committee, and Great Pond Park.
- Hotel managers and private developers.
- Local environmental associations and Rotary Clubs that engage in activities to conserve and manage the VI environment.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	400	1000	500	1000
2008	320	500	450	500

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Education/Classes in natural resources management, VI forest ecosystems

Year	Target	Actual
2008	1	18

**Output #2****Output Measure**

- Workshops -VI forests, medical plants, environmental landscaping, watershed awareness, VI cultural and natural history, ecotourism, in-door air quality

Year	Target	Actual
2008	3	2

**Output #3****Output Measure**

- One on One consultation with residents, government employees, students

Year	Target	Actual
2008	175	84

**Output #4****Output Measure**

- Tours of VI natural areas for students and community groups

Year	Target	Actual
2008	6	7

**Output #5****Output Measure**

- E-education – NREM websites updated

Year	Target	Actual
2008	1	0

**Output #6****Output Measure**

- Publications, articles, posters related to natural resources and environmental management

Year	Target	Actual
2008	4	7

**Output #7****Output Measure**

- Demonstration site relating to native plants, environmental management

Year	Target	Actual
2008	2	2

**Output #8****Output Measure**

- PSA's

Year	Target	Actual
2008	1	0

**Output #9****Output Measure**

- Fairs

Year	Target	Actual
2008	2	2

**Output #10****Output Measure**

- TV/Media

Year	Target	Actual
2008	2	1

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Recommended BMP's in environmental management master plans will be adopted by natural resource managers. Successful plans will be used as prototypes for other critical habitats, parks and areas designated as part of the VI Territorial Park.
2	After attending non-formal education programs, one hundred and fifty (150) people or more will adopt recommended landscaping practices, incorporate native plants into their landscapes, protect and/or enhance soil resources for agriculture, construction, and landscaping.
3	Contacts will be made with at least five (5) members of immigrant populations who can serve as community liaisons to promote the adoption of VI laws protecting natural resources and less littering of public recreational areas.
4	Direct and indirect contacts will cause over (1000) adults and students to adopt practices that protect native plants and their habitats because of their increased understanding of the human effects on native ecosystems.
5	Over 500 stakeholders (government personnel, developers, community groups and students) will become more aware of the connections between terrestrial and marine communities, how watersheds function, and the importance of watershed protection.
6	Watershed research will result in at least three (3) projects within targeted watersheds to protect water quality.
7	Five hundred (500) Virgin Islands youth will increase their awareness of VI natural and cultural resources, and careers in environmental management and ecotourism. At least fifteen (15) individuals will be trained as ecohiking guides.

**Outcome #1**

**1. Outcome Measures**

Recommended BMP's in environmental management master plans will be adopted by natural resource managers. Successful plans will be used as prototypes for other critical habitats, parks and areas designated as part of the VI Territorial Park.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	2	6

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Magens Bay Authority (MBA) has been charged with the management of St. Thomas Territorial parks including Magens Bay and the new Smith Bay Park. These popular conservation areas comprise unique natural coastal ecosystems that attract residents, tourists, schools and scientific researchers. MBA is responsible for developing comprehensive environmental management plans that will protect these areas. Hotel managers and developers of large properties (>300 acres) are also responsible for implementing sound environmental management practices to protect their properties.

**What has been done**

CES promoted BMPs at Territorial parks on St. Thomas. During formal and informal meetings and consultations, CES identified environmentally sensitive natural habitats and monitored land clearing at Smith Bay Park. CES helped organize a team (public-private) whose proposal was selected by MBA to develop a master plan for Magens Bay. CES worked with a hotel and developers to protect native plant communities and wildlife habitats on various large properties. CES provided technical assistance to a local landscape architectural firm constructing a native plant nursery.

**Results**

Based on CES recommendations, MBA agreed to fence off sensitive vegetated areas at Smith Bay Park and to restore other areas that had been improperly cleared. MBA also restricted vehicular access to various threatened natural areas and endangered VI tree boa habitat and wetlands areas. New plant growth has been observed in previously disturbed areas, and important native plant communities (including wetlands) are protected. As a result of meetings between the MBA Board of Directors and CES regarding Smith Bay Park, strong and cooperative working relationships have been established. CES consultations with St. Thomas hotel managers and developers have resulted in the protection of native plant communities and wetlands and agreements to restore disturbed natural habitats. Trees and shrubs from the native plant nursery that CES promoted are now available to be planted in the Territorial Parks or on various construction sites.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
134	Outdoor Recreation
123	Management and Sustainability of Forest Resources
112	Watershed Protection and Management
136	Conservation of Biological Diversity

**Outcome #2**

**1. Outcome Measures**

After attending non-formal education programs, one hundred and fifty (150) people or more will adopt recommended landscaping practices, incorporate native plants into their landscapes, protect and/or enhance soil resources for agriculture, construction, and landscaping.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	200	35

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Developers, engineers, architects, environmental groups, businesses and property owners requested technical information to protect landscapes and the environment and to comply with the VI government permitting requirements for building.

**What has been done**

Through phone consultations, publications and site visits, clients were provided with information about native plant conservation, environmental landscaping, use of native plants, and erosion control. CES has been increasing and maintaining its contacts with professionals who are involved with various aspects of construction site planning and earth change operations.

**Results**

More developers, hotel managers, engineers, and architects are regularly requesting CES technical information about native plants, native habitats, habitat restoration, and erosion control. More native plants were selected for landscaping on construction sites. Clients' technical knowledge of native plant species and native habitats increased. As a result of several CES consultations and two site-visits, the Ritz Carlton Hotel on St. Thomas developed plans based on CES recommendations to restore a salt pond on the hotel property and to construct viewing areas for guests. Based on phone and email consultations and site visits, developers of a large St. Thomas subdivision (>300 acres) agreed to introduce stricter land clearing guidelines for property owners and more comprehensive plans to restore native vegetation to areas cleared during road construction. Another property owner (>300 acres) agreed to preserve and plant native plants on his property.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
112	Watershed Protection and Management
136	Conservation of Biological Diversity

**Outcome #3**

**1. Outcome Measures**

Contacts will be made with at least five (5) members of immigrant populations who can serve as community liaisons to promote the adoption of VI laws protecting natural resources and less littering of public recreational areas.

*Not reporting on this Outcome for this Annual Report*

**Outcome #4**

**1. Outcome Measures**

Direct and indirect contacts will cause over (1000) adults and students to adopt practices that protect native plants and their habitats because of their increased understanding of the human effects on native ecosystems.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	200	150

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Many educators, resource managers, students, environmental groups and the general public want to increase their understanding of V.I. native plants/natural ecosystems and the effects of human alterations to natural ecosystems.

**What has been done**

CES delivered information to stakeholders about how native plant habitats are impacted by humans. The CDC and CES book, Island Peak to Coral Reef-The Plant and Marine Communities of the Virgin Islands, was distributed to teachers and librarians to raise awareness about native plant communities. CES assisted UVI MMES graduate students with research projects that protect native plants and habitats. CES provided resource managers, developers, landscape architects, etc. with technical assistance about VI plant communities, invasive plant control, and native plants for landscaping.

**Results**

The CDC/CES book Island Peak to Coral Reef was formally incorporated into the MMES curriculum and was also used by the Yale University Director of Environmental Science Program to train Yale graduate students studying native plant communities in various watersheds on St. Thomas. Clients indicated that they would implement CES recommendations regarding native plant protection, cultivation, and invasive non-native plant control as a result of CES tours, workshops and private consultations with environmental groups, garden clubs, developers, and students. In general, clients often requested additional information about native plants/native plant communities indicating increased awareness of the issues affecting terrestrial resources. Posters CES created about VI native plants were requested by government employees and teachers. These posters are now displayed at the VI Department of Planning and Natural Resources and elsewhere.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
136	Conservation of Biological Diversity

**Outcome #5**

**1. Outcome Measures**

Over 500 stakeholders (government personnel, developers, community groups and students) will become more aware of the connections between terrestrial and marine communities, how watersheds function, and the importance of watershed protection.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	500	210

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Stakeholders (government personnel, developers, community groups, resource managers, VI EPSCoR, UVI MMES faculty and students) requested information relating to the connections between terrestrial and marine communities and watershed protection. Reasons for requests included: curriculum and/or program development compliance with governmental regulations, concern about environmental degradation, management of Territorial Park natural environments, protection of hotel and other private properties, classroom assignments, environmental stewardship initiatives.

**What has been done**

CES strengthened partnerships with UVI's CDC, VI EPSCoR and science faculty to investigate land-sea interconnectivity and watershed protection needs. CES encouraged VI EPSCoR to expand its research focus, Caribbean coral reefs, to include terrestrial studies. Workshops, site visits, informal meetings, seminars, field trips, media interviews, phone consultations and publication distribution provided information relating to watershed awareness and protection. Outreach activities focused on VI watercourses (guts) as connections between the land and sea.

**Results**

Over 50 stakeholders (government employees, residents near a key watershed, and the general public) became more aware of the interconnectivity between the land and sea through participation in radio shows, workshops, site-visits focusing on VI watercourses (guts) that CES helped conduct as part of the WRRI-funded project to 'Investigate the Rehabilitation of Guts as Urban Recreational Spaces in the U.S. Virgin Islands'. As a result of a CES presentation sponsored by VI EPSCoR and requested by the Dept. of Education, at least 40 VI librarians and other school professionals became more aware of how to use the CES-CDC book, Island Peak to Coral Reef - The Plant and Marine Communities of the Virgin Islands to teach students and teachers about the connectivity between land and sea in the Virgin Islands. Other stakeholders (university students, resource managers, general public) learned about land-sea connectivity through site visits, tours, and direct consultations.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
136	Conservation of Biological Diversity

**Outcome #6**

**1. Outcome Measures**

Watershed research will result in at least three (3) projects within targeted watersheds to protect water quality.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	1	2

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Those directly and indirectly responsible for watershed management (Magens Bay Authority, National Park Service, UVI, Governmental agencies, property owners) require research-based information to be able to make the best decisions regarding watershed protection.

**What has been done**

CES is partnering with the Conservation Data Center (CDC) to develop in a VI Wetlands and Watersheds Characterization Phase II: Inventory, Monitoring, Assessment, Management and Education in the USVI project funded by VI DPNR's Division of Environmental Protection. As part of the project, CES is helping produce a VI watershed-wetlands field guide for resource managers with GIS maps and characterizations of over 50 targeted watersheds. CES co-researched a study funded by WRRRI: 'The Rehabilitation of Guts as Urban Recreational Spaces in the U.S. Virgin Islands'.

**Results**

The inventory of VI watersheds and wetlands was completed and the watershed-wetlands field guide for resource managers is under development. At the invitation of CES and CDC, the Division of Fish and Wildlife has agreed to co-author this publication, and FWS wetland and wildlife surveys will be incorporated into the publication. The final report for the study of VI watercourses (guts) has been completed. As a result of this project, watershed residents, environmental groups, UVI-VIMAS, ROTC, schools and the general public are coordinating efforts to improve stream management and debris removal in at least one gut (Savan gut) in a targeted watershed in an urban area of St. Thomas. In partnership with Eastern New Mexico University, two grant proposals were developed and approved that will partially fund plants and equipment for the stream restoration project. The terrestrial component's final project report for the 'Pilot Study to Investigate the Impacts of Land-based Activities on Coastal Resources' within three targeted watersheds was adopted by the UVI MMES program to provide guidelines for the graduate students and subsequent research studies.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
112	Watershed Protection and Management

**Outcome #7**

**1. Outcome Measures**

Five hundred (500) Virgin Islands youth will increase their awareness of VI natural and cultural resources, and careers in environmental management and ecotourism. At least fifteen (15) individuals will be trained as ecohiking guides.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	100	15

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

UVI Faculty, UVI graduate students, and MMES program are training persons in environmental management preparing them for careers in this and related areas. Tour guides, residents and visitors are also interested in eco-tourism and in the natural and cultural resources of the islands.

**What has been done**

CES has supported training for careers in environmental management by serving as an advisor to students in the UVI MMES program. CES provide assisted faculty and graduate students with program and project development. CES helped students gain access to research areas and employment in fields related to their research. Faculty and students were also referred or introduced to individuals who had careers in environmental management. CES provided St. Thomas cab drivers/tour operators with information about natural resources.

**Results**

Tour guides incorporated information provided by CES into their tours and requested additional information. As a result of CES referrals, MMES students gained access to research areas on public and private properties and exposure to the environmental managers of those properties. CES helped one student get employment as an intern in a native plant nursery on St. Thomas.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
605	Natural Resource and Environmental Economics
134	Outdoor Recreation

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Government Regulations

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- After Only (post program)
- Before-After (before and after program)
- During (during program)

**Evaluation Results**

CES worked closely with Magens Bay Authority to plan, implement and evaluate BMPs at Smith Bay Park and Magens Bay. During the implementation phase, CES occasionally recommended that MBA was improperly implementing various BMPs, and corrections were made. MBA responded favorably to the evaluation methods used by CES.

**Key Items of Evaluation**

**Program #4**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Urban Forestry

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	20%			
124	Urban Forestry	70%			
125	Agroforestry	10%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	0.8	0.0	0.0	0.0
<b>Actual</b>	1.6	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
42000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
42000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
9746	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Partnerships were established and strengthened with public and private agencies, and community leaders and groups to provide education, information, and technical advice to the general population. This was achieved through the use of publications, seminars, mass media, field day and exhibits as well as personal contacts.

**2. Brief description of the target audience**

The targeted audience was public and private landowners and agencies, community leaders and organizations, youth groups, and civic organizations.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	950	5500	660	1500
2008	345	7000	220	600

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of educational classes in tree identification

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	3	2

**Output #2****Output Measure**

- Number of workshops/demonstrations in tree pruning

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	3	1

**Output #3****Output Measure**

- Number of educational classes in tree care

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	3	1

**Output #4****Output Measure**

- Number of one-on-one consultation with residents

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	120	75

**Output #5****Output Measure**

- Number of public service announcements

*Not reporting on this Output for this Annual Report*

**Output #6****Output Measure**

- Number of articles/publications on tree care and urban forest management

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	3	1

**Output #7****Output Measure**

- Number of fairs and exhibits displaying best management practices and other information pertaining to the Urban Forestry

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	2	1

**Output #8****Output Measure**

- Number of seminars on economic opportunities available through using and/or recycling forest resource

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**Output #9****Output Measure**

- Number of residents, non-profit organizations, and public and private entities establishing composting projects

*Not reporting on this Output for this Annual Report*

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of residents, landowners, policymakers will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest
2	Number of residents and landowners, public and private agencies, and nonprofit organizations will increase their knowledge of the care and management of the urban forest
3	Number of homeowners, landowners, municipalities will actively reduce, reuse, and recycle yard waste
4	Number of residents will restore urban trees following hurricanes and tropical storms
5	Number of landowners and residents will expand entrepreneurial opportunities from the urban and suburban forest resources

**Outcome #1****1. Outcome Measures**

Number of residents, landowners, policymakers will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	350	300

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

As much as trees are incorporated into the fabric of outdoor social settings and as a natural part of that environment, residents at times take for granted the contributions of trees. Because they are silent occupants of the urban environment, most residents aren't aware of the contribution of trees beyond providing instant shade on a hot day. As a result, the incorporation of trees in the urban and suburban environment and the subsequent management are often overlooked by all segments of the society. As a result, trees are removed unnecessarily, planted improperly, or left out of urban planning projects all together. Those that are included or incorporated are poorly managed and mostly mistreated by utility companies, untrained landscaping crews, homeowners, and other municipal and private sector agencies.

**What has been done**

Workshops, seminars, and radio programs were the primary means of providing information and technical advice to public and private agencies, utility companies, homeowners and policymakers.

**Results**

Through personal contact, pre- and post-test, and anecdotal information, ninety-five percent (95%) of participants reported that they are now more aware of the economical and environmental benefits of trees. Thirty percent (30%) of participants plan to seek more information about the subject and another fifty percent would like to receive training in urban forest management. One resident has now become an entrepreneur by reusing pruned bamboo stems and converting them into works of art.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
125	Agroforestry
123	Management and Sustainability of Forest Resources

**Outcome #2****1. Outcome Measures**

Number of residents and landowners, public and private agencies, and nonprofit organizations will increase their knowledge of the care and management of the urban forest

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	700	562

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Trees in the urban and suburban forest exist under conditions not found in the larger natural forest and thus require more intensive and specialized attention. High temperatures, isolation, restricted growing areas, poor soil quality are just some conditions under which urban trees grow. Most homeowners, and public and private landscape maintenance crews, do not have formal training in tree care. Poor pruning cuts, or lack of pruning, ill-advised tree selection, and other poor management practices are evident throughout many of our communities. Trees in the public and private landscape are suffering from neglect and are showing the evidence of mismanagement. Some residents have begun to demand that more attention be paid to the care of public trees. Surveys have revealed that of the homeowners who maintained trees in their landscape nine-eight percent (98%) have had no formal training in tree management. Seventy-five percent (75%) obtained their knowledge of tree care from neighbors, books, and trial and error.

**What has been done**

Seminars, workshops and one-on-one contact with public landscape crews have been used to provide participants and residents with current tree management information. Radio appearances have also been used to provide general information to a broad audience. On-site visits provided an additional opportunity for hands-on practical demonstration and information transfer.

**Results**

Post workshop surveys revealed that eighty-five percent (85%) of participants in the workshops and seminars indicated that they learned more about tree management than they had ever learned in the past. Some participants, about twenty-five percent (25%), indicated that they had received enough information and had practiced enough in the workshop to be able to prune their own trees. Another 75% of individuals would continue to seek more information and attend more training sessions as they become available. Public and private landscape crews will require periodic training as turnover is quite high in that industry.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
124	Urban Forestry
123	Management and Sustainability of Forest Resources

**Outcome #3**

**1. Outcome Measures**

Number of homeowners, landowners, municipalities will actively reduce, reuse, and recycle yard waste

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	150	0

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The percentage of yard waste in the territory's landfills is high. Landfill fires are sustained by the wood piles dumped or stored throughout the facility. Shredded yard trimming makes an ideal mulch and reduces the waste stream going into the landfill. Stems, trunks, and branches, can be reused in arts and crafts. More residents should become aware of the benefits of recycling the yard waste.

**What has been done**

Due to staff shortages and other administrative priorities, no formal educational classes were conducted during this year. There were some indirect contacts made with the general public through radio appearances.

**Results**

Persons who participated in past classes continue to actively compost yard waste and food scraps. New persons are also starting their own compost sites with formal classes stemming from heightened awareness of going green.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
124	Urban Forestry
123	Management and Sustainability of Forest Resources

**Outcome #4**

**1. Outcome Measures**

Number of residents will restore urban trees following hurricanes and tropical storms

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	150	0

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Tropical storms are a fact of life in the territory. Trees in general are negatively affected in some way depending on the severity of the storm. Urban trees in particular are adversely affected by storms because generally they are growing in less than ideal conditions thus, predisposing them to a higher risk of failure. If damaged trees aren't given corrective measures within a short time or fallen trees aren't erected right away, then chances of survival begin to diminish as time goes on.

**What has been done**

Public service announcements were made via local radio.

**Results**

It is hard to determine with any accuracy the amount of individuals who were actively involved in restoring damaged and/or fallen trees. From observation, public and private maintenance crews, and non-profit organizations were actively involved in tree restoration. Through on-site visits and telephone contacts, technical advice was provided to residents, landscapes crews, and organizations that were involved in forest restoration.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
125	Agroforestry
123	Management and Sustainability of Forest Resources
124	Urban Forestry

**Outcome #5**

**1. Outcome Measures**

Number of landowners and residents will expand entrepreneurial opportunities from the urban and suburban forest resources  
*Not reporting on this Outcome for this Annual Report*

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Retrospective (post program)
- Before-After (before and after program)

**Evaluation Results**

Pre- and Post-tests were administered at the workshops. They provided a good picture of the effectiveness of the lectures. There is still a need to restructure some of the questions in order to receive the most accurate responses. Follow up survey at short-term (3 months) and long-term (6-8 months) will still need to be administered in order to ascertain the level of behavioral changes that have occurred.

**Key Items of Evaluation**

**Program #5**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Urban Gardening

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
205	Plant Management Systems	90%			
403	Waste Disposal, Recycling, and Reuse	10%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.1	0.0	0.0	0.0
<b>Actual</b>	2.1	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
50000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
50000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Conducted workshops, seminars, field demonstrations, and tours, one-on-one counseling, on-site visits; used electronic media.

**2. Brief description of the target audience**

•Home owners •Horticultural Organizations •Public Housing Residents •Senior citizens homes •School teachers •Policy Makers •Master Gardeners Candidates •Youth groups

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	950	5500	660	1500
2008	215	5000	410	600

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of educational classes to help residents to plan and create a garden

Year	Target	Actual
2008	3	4

**Output #2**

**Output Measure**

- Number of workshops/demonstrations using low cost, efficient, technologies, practices and principles in gardening

Year	Target	Actual
2008	3	6

**Output #3**

**Output Measure**

- Number of educational classes in the benefits of proper garden management

Year	Target	Actual
2008	3	5

**Output #4**

**Output Measure**

- Number of one-on-one consultation with residents about gardening

Year	Target	Actual
2008	120	250

**Output #5**

**Output Measure**

- Number of public service announcements

*Not reporting on this Output for this Annual Report*

**Output #6**

**Output Measure**

- Number of articles/publications on urban gardening management

Year	Target	Actual
2008	3	1

**Output #7**

**Output Measure**

- Number of fairs and exhibits displaying best management practices and other information pertaining to the Urban Gardening program

Year	Target	Actual
2008	2	2

**Output #8**

**Output Measure**

- Number of seminars or tv media appearances/programs on urban gardening

Year	Target	Actual
2008	1	2

**Output #9**

**Output Measure**

- Number of seminars on radio appearances/programs on urban gardening

Year	Target	Actual
2008	4	10

**Output #10**

**Output Measure**

- Number of demonstration sites developed using urban gardening principles and practices

Year	Target	Actual
2008	1	1

**Output #11**

**Output Measure**

- Number of workshops and public and private entities establishing gardens

Year	Target	Actual
2008	35	2

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of residents will become more aware of the benefits of gardening
2	Number of residents, nonprofit organizations, youth groups, and public and private entities that will increase their knowledge of more efficient low cost technologies, practices, and principles
3	Number of home gardeners will realize a reduction in their cost of living resulting from urban gardening
4	Number of residents, nonprofit organizations, youth groups, and public and private entities establishing gardens
5	Number of residents, nonprofit organizations, youth groups, public and private entitites starting compost.

**Outcome #1****1. Outcome Measures**

Number of residents will become more aware of the benefits of gardening

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	350	515

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Ninety-nine percent (99%) of the food consumed in the territory is imported. With the increase in energy costs, Virgin Islanders have been paying extremely high prices for food. As the health consciousness movement of the early 80's becomes a sustained way of life, a growing number of Virgin Islands residents have been seeking to improve their quality of life. Exercise programs, stress reduction classes, nutrition classes and other avenues of health reform are becoming an integral part of wellness programs for many residents. Cancer, heart disease and high blood pressure are the major causes of death in the Virgin Islands. All can be controlled and in some instances prevented by lifestyle changes. Gardening can play a major role in contributing to the improvement in overall health in many ways.

**What has been done**

Lectures and seminars, have been the primary means of sharing information on the benefits of gardening to youth groups, adult organizations, and individual residents. Periodic radio appearances also provided a means of reaching a wider audience.

**Results**

The majority of adults (70 %) indicated that they learned a new benefit of gardening that they were not aware of before the presentation. Ninety-nine percent (99%) of elementary school aged children were not aware of the benefits derived from gardening. Of the high school students that participated in the lectures, eighty-five percent (85%) became more aware of the economic and health benefits of gardening. Adults and high school youth indicated that they would continue to seek more information about gardening.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
205	Plant Management Systems

**Outcome #2****1. Outcome Measures**

Number of residents, nonprofit organizations, youth groups, and public and private entities that will increase their knowledge of more efficient low cost technologies, practices, and principles

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	450	520

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Most homeowners, youth garden groups, and public and private agencies still use traditional methods of irrigation, cultivation and general growing techniques. These growing practices usually are not the most efficient or cost effective. With the cost of living being so high, gardeners of all types need to find ways to use the latest technology and most effective gardening practices in order to reduce cost.

**What has been done**

Tours of the CES demonstration garden was the primary teaching tool. Gardens and farms that use the best management practices were the primary means of educating the public.

**Results**

Even though some of the current technologies such as specialized mulch materials, drip irrigation, and digital irrigation timers, have been in existence for at least 18 years, many residents have never seen them in use before. Approximately ninety-five percent (95%) of residents were not exposed to drip irrigation and an equal amount didn't know its benefits.

Of the adults participating in the educational events and tour, 45% would like to receive more information and would attend future workshops and seminars on the use of the equipment and practices. One elementary school was also used as an off-site demonstration site for new technology and water conservation practices.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
205	Plant Management Systems

**Outcome #3**

**1. Outcome Measures**

Number of home gardeners will realize a reduction in their cost of living resulting from urban gardening  
*Not reporting on this Outcome for this Annual Report*

**Outcome #4**

**1. Outcome Measures**

Number of residents, nonprofit organizations, youth groups, and public and private entities establishing gardens

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	150	12

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

With 99% of the food imported into the Virgin Islands (VI) and the final cost of most commodities 15-30% higher than on the U.S. mainland, VI residents have been looking for ways to cut their food bill. In addition to reducing food cost, youth need to experience the benefits of gardening as well. Obesity in the youth and adults is one of the health concerns of healthcare professionals.

**What has been done**

Extension staff provided school administrators and teachers with information on the benefits of gardening through on-site visits and one-on-one contact. Demonstration garden tours provided students and other interested residents with an opportunity to see a developed garden plot.

**Results**

One elementary school and one Head Start developed raised bed and container gardens with the assistance of CES staff. The elementary school garden was a success. Besides the crop of vegetables that were produced and sold, there was a marked improvement in the behavior of the boys participating in the gardening club. Eighty-five percent of the participants reported that they learned more about gardening from building the actual garden than before the garden project. Sixty-five percent of students indicated that they were inspired by what they saw at the CES demonstration garden. Twenty percent of the adults that visited the demonstration garden actually created their own garden based on their observations and interaction with staff.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
205	Plant Management Systems

**Outcome #5**

**1. Outcome Measures**

Number of residents, nonprofit organizations, youth groups, public and private entities starting compost.

*Not reporting on this Outcome for this Annual Report*

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Competing Public priorities
- Competing Programmatic Challenges

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Before-After (before and after program)

**Evaluation Results**

Staff shortages have severely hindered the ability to execute plans for the urban gardening projects. The ability to gather follow-up behavioral changes is lacking and needs to be implemented. Survey instruments for children have to be restructured in order to achieve accurate responses and to plan for future targeted project.

**Key Items of Evaluation**

**Program #6**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Water Quality

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	10%			
104	Protect Soil from Harmful Effects of Natural Elements	10%			
111	Conservation and Efficient Use of Water	40%			
112	Watershed Protection and Management	20%			
133	Pollution Prevention and Mitigation	20%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.8	0.0	0.0	0.0
<b>Actual</b>	1.9	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
80000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
80000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
71000	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Interest in the popular V.I. Home & Farm Water Quality Assessment (VI\*A\*Syst) program spread mostly by word-of-mouth. Throughout the year, VI\*A\*Syst presentations and workshops were regularly requested by schools, community groups, youth groups, churches, scouts, businesses, maintenance professionals, government agencies, and residents of the British Virgin Islands. These presentations, focused on transmitting information about water quality protection and least-toxic household products to the respective audiences so convincingly that many attendees indicated that they would stop using hazardous products. Locally oriented outreach materials were also requested and disseminated related to water conservation, drinking-water

protection, waste water disposal and best management practices for pollution prevention through the VI\*A\*Syst program. Linkages between lifestyle practices, watershed health and water quality were key outreach focuses of the VI\*A\*Syst program. CES conducted tours and workshops that promoted watershed awareness with a special focus on the health of VI watercourses (guts). Watershed awareness also was promoted through the adoption of the methodology used by the CDC-CES "Pilot Study to Integrate the Effects of Watershed Activity Patterns and Coastal Processes on Near-Shore Coral Reefs" in targeted watersheds by the UVI Master of Marine and Environmental Science program and the UVI Center for Marine and Environmental Studies. This study funded by VI EPSCoR utilized GIS technology to investigate the patterns of sediment delivery and septic system nutrient loading and the impacts on coastal water quality. Study findings are also being utilized in a CDC-CES grant-funded project to develop a field guide of VI wetlands and watersheds for resource managers funded by the VI Div. of Environmental Protection and the VI Dept. of Agriculture. CES promoted the implementation of BMPs to protect water quality at coastal public parks, hotels and large subdivisions with extensive coastal and off-shore resources. Media outreach methods utilized by the WQ Program were PSAs, television video spots, and local talk shows (radio & TV). In addition, local newspaper reporters published information referring to water quality issues obtained through interviews with WQ program staff. During office, phone consultations, and site-visits, clients were provided with technical assistance about erosion and sediment control, storm water control, preserving land cover, xeriscaping, wetlands preservation and restoration, preservation of riparian systems (guts) and alternative waste-water treatment systems. Ties with the Region 2 WQ team strengthened. The team collaborated in the design of a demonstration animal waste treatment facility to be constructed on a St. Croix farm. Progress was made in obtaining construction materials for the demonstration animal waste digester and facility. Additional collaboration with the EPA Region 2 liaison resulted in the development of a pollution prevention grant.

**2. Brief description of the target audience**

Policy-makers and regulatory personnel, community groups, teachers and students, business community, resource managers, owners/developers of large properties (>300 acres), non-governmental organizations, and the general public.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	200	1000	200	300
2008	110	150	60	200

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	Extension	Research	Total
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Education/Classes/Training in water quality protection and VI \* A \* Syst Program

Year	Target	Actual
2008	2	2

**Output #2**

**Output Measure**

- Workshops / Presentations about water quality protection, less toxic household products and NPS BMP's through the VI \* A \* Syst Program, on-site waste water treatment, cistern care, and watershed protection.

Year	Target	Actual
2008	4	8

**Output #3**

**Output Measure**

- One on one consultations with residents, government employees, students

Year	Target	Actual
2008	175	44

**Output #4**

**Output Measure**

- Tours of VI natural areas with students, community groups and others to raise awareness about watersheds and water quality protection.

Year	Target	Actual
2008	2	8

**Output #5**

**Output Measure**

- Educational/research publications, articles, posters, newsletters, GIS maps related to non-point source pollution, on-site wastewater treatment, watersheds, VI \* A \* Syst, and protection of VI native plant communities.

Year	Target	Actual
2008	6	5

**Output #6**

**Output Measure**

- PSAs

*Not reporting on this Output for this Annual Report*

**Output #7**

**Output Measure**

- Fairs

Year	Target	Actual
2008	2	2

**Output #8**

**Output Measure**

- TV/Media

Year	Target	Actual
2008	2	3

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Awareness of the health risks associated with water quality impairment and water and wastewater treatment systems will increase, and 75 homeowners will consider installing or retrofitting their existing septic systems with improved packaged sewage treatment systems or alternative wastewater treatment systems.
2	Fifty (50) homeowners will request technical assistance with the evaluation of old septic systems; 20 homeowners will proactively pump their septic systems, and three (3) businesses will construct alternative wastewater treatment systems based on successful prototypes recommended by CES.
3	Educational materials, workshops, tours and other direct and indirect outreach methods will increase public knowledge of the characteristics and functions of aquatic ecosystems (guts, salt ponds, mangrove lagoons, bays and oceans) including their role within a watershed. Five (5) homeowners and/or natural resource managers will protect riparian and wetlands vegetation. Fifty (50) clients will become aware of the VI laws protecting riparian and wetlands vegetation.
4	Requests for site visits and VI*A*Syst assessments and presentations will increase. 75 clients or more will each adopt at least one VI*A*Syst recommended practice such as the use of non-toxic household products, etc. Fifty (50) homeowners will improve cistern water quality by following CES recommendations.
5	At least twenty (20) clients will implement effective stormwater, erosion and sediment control practices and xeriscaping. The VI Dept. of Public Works roadside maintenance crews (10) will improve their roadside clearing methods to prevent soil erosion and sediment runoff.
6	Over 1000 VI youth will become aware of the vital connections between human activities and water quality, how land-based activities affect coastal water quality, why watershed protection is important to them and their well-being. Youth and volunteer involvement in water quality protection and resource conservation will increase.
7	Information from watershed studies utilizing oceanographic and GIS technology will lead to specific recommendations for watershed residents and government agencies about how to reduce sediments and nutrients in stormwater runoff.

**Outcome #1**

**1. Outcome Measures**

Awareness of the health risks associated with water quality impairment and water and wastewater treatment systems will increase, and 75 homeowners will consider installing or retrofitting their existing septic systems with improved packaged sewage treatment systems or alternative wastewater treatment systems.

*Not reporting on this Outcome for this Annual Report*

**Outcome #2**

**1. Outcome Measures**

Fifty (50) homeowners will request technical assistance with the evaluation of old septic systems; 20 homeowners will proactively pump their septic systems, and three (3) businesses will construct alternative wastewater treatment systems based on successful prototypes recommended by CES.

*Not reporting on this Outcome for this Annual Report*

**Outcome #3**

**1. Outcome Measures**

Educational materials, workshops, tours and other direct and indirect outreach methods will increase public knowledge of the characteristics and functions of aquatic ecosystems (guts, salt ponds, mangrove lagoons, bays and oceans) including their role within a watershed. Five (5) homeowners and/or natural resource managers will protect riparian and wetlands vegetation. Fifty (50) clients will become aware of the VI laws protecting riparian and wetlands vegetation.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	10	61

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Through direct and indirect methods, resource managers, property owners, educators, researchers, etc. require basic and technical information about riparian and aquatic ecosystems, including their roles within watersheds.

**What has been done**

CES helped conduct workshops for government personnel, environmental groups, and engineers about the laws protecting guts. Individual clients were also provided with similar information. CES worked with VI government agencies to stop the illegal clearing of riparian vegetation. CES helped hotel personnel develop a plan to restore and showcase wetlands on the hotel property and assisted resource managers with coastal water quality protection. During consultations and a tour, CES informed TNC about St. Thomas watersheds for DPNR's Comprehensive Land and Water Use Plan update.

**Results**

As a result of CES workshops and outreach efforts, an environmental group and residents near a St. Thomas watercourse (gut) have agreed to implement BMPs that will help protect or replace riparian vegetation in one or more guts. The illegal clearing of vegetation in two guts was stopped by CES's interaction with local government regulatory agencies. Local hotel personnel agreed to adopt recommendations made by CES about how to restore and protect a salt pond and mangroves near the hotel. CES helped TNC revise and improve the quality of information to be incorporated into GIS maps for DPNR's Comprehensive Land and Water Use Plan update. UVI research faculty and students incorporated information re: riparian ecosystems provided by CES into various studies and research projects.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

**Outcome #4**

**1. Outcome Measures**

Requests for site visits and VI\*A\*Syst assessments and presentations will increase. 75 clients or more will each adopt at least one VI\*A\*Syst recommended practice such as the use of non-toxic household products, etc. Fifty (50) homeowners will improve cistern water quality by following CES recommendations.

*Not reporting on this Outcome for this Annual Report*

**Outcome #5**

**1. Outcome Measures**

At least twenty (20) clients will implement effective stormwater, erosion and sediment control practices and xeriscaping. The VI Dept. of Public Works roadside maintenance crews (10) will improve their roadside clearing methods to prevent soil erosion and sediment runoff.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	6	14

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

To protect the V.I. environment, prevent economic loss and comply with governmental regulations, CES clients (resource managers, Public Works personnel, businesses, developers, environmental groups, property owners, etc.) need technical assistance with xeriscaping, stormwater, erosion and sediment control.

**What has been done**

During informal meetings, CES provided technical assistance re: erosion and sediment control BMPs to the VI Dept. of Public Works (DPW) maintenance crews and the Director of roadside maintenance. CES also served as a technical consultant to Magens Bay Authority by providing MBA employees and volunteers with information about how to prevent stormwater runoff and sedimentation at the Smith Bay (Territorial) Park.

**Results**

Magens Bay Authority has taken action to adopt the BMPs (protection of vegetated zones, improperly cleared areas, stabilization of cleared access roads) recommended by CES to prevent the pollution of coastal waters by sediment-laden stormwater at Smith Bay Park. DPW employees followed CES's recommendation to reduce clearing of vegetation and mulch from the edge of a watercourse. The DPW Director of Roads on St Thomas agreed to adopt BMPs to reduce erosion and sedimentation caused by roadside clearing.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
104	Protect Soil from Harmful Effects of Natural Elements
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
101	Appraisal of Soil Resources

**Outcome #6**

**1. Outcome Measures**

Over 1000 VI youth will become aware of the vital connections between human activities and water quality, how land-based activities affect coastal water quality, why watershed protection is important to them and their well-being. Youth and volunteer involvement in water quality protection and resource conservation will increase.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	200	48

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

VI youth and those who regularly instruct them need basic scientific information about the unique connections between land and sea and how human activities affect water quality. With the rapid urbanization in the VI, the youthful population will be the most affected by land-use impacts degrading water quality.

**What has been done**

During several interactions, CES provided eight (8) students enrolled in the UVI Master of Marine and Environmental program and 40 elementary school students with information about land-based activities that negatively affect coastal water quality.

**Results**

MMES students have incorporated information provided by CES about the interconnectivity between land and sea into their research studies. Forty VI youth became more aware of the basic issues affecting coastal water quality in the Virgin Islands evidenced by their verbal responses to CES presentations.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation
112	Watershed Protection and Management

**Outcome #7**

**1. Outcome Measures**

Information from watershed studies utilizing oceanographic and GIS technology will lead to specific recommendations for watershed residents and government agencies about how to reduce sediments and nutrients in stormwater runoff.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	1	2

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Watershed residents, government agencies, resource managers, other partnering academic institutions require scientific information utilizing oceanographic and GIS technology in order to better understand the patterns of stormwater runoff and the impacts of sediment and nutrient-laden runoff.

**What has been done**

GIS maps of St. Thomas guts were presented to government personnel and environmental groups during workshops produced during a project that CES co-researched investigating the recreational potential of VI guts. CES provided The Nature Conservancy with data for GIS watershed maps of to be used to determine areas of concern that affect marine conditions.

**Results**

CES developed a gut management plan for one St. Thomas gut based on GIS maps developed by the WRRRI grant-funded project to investigate the recreational potential of VI guts, and an environmental group used these GIS maps to plan activities to restore the gut. The Nature Conservancy is incorporating CES watershed data in GIS maps that will be incorporated in DPNR's Comprehensive Land and Water Use Plan.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation
112	Watershed Protection and Management

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Government Regulations

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- After Only (post program)
- Before-After (before and after program)
- During (during program)

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #7**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Computer Training and Technology Program

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
903	Communication, Education, and Information Delivery	100%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.2	0.0	0.0	0.0
<b>Actual</b>	1.6	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
60000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
60000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Advertised the Computer Training and Technology Program.

Conducted eight weeks Basic Computer Training Courses on how to use Microsoft Windows, Microsoft Word, E-mail, and search for information using the World Wide Web.

**2. Brief description of the target audience**

The target audience consisted mainly of computer illiterate adults from low income households.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	80	3000	60	2500
2008	206	4000	85	2600

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Conduct two days workshops of Microsoft E-mail

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	6	7

**Output #2**

**Output Measure**

- Conduct two days workshops of Microsoft Word

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	6	6

**Output #3**

**Output Measure**

- Conduct two days workshops of Microsoft Windows

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	6	8

**Output #4**

**Output Measure**

- Conduct two days workshops of Microsoft Internet

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	6	7

**Output #5**

**Output Measure**

- Conduct two days workshops on Microsoft Excel

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	6	4

**Output #6**

**Output Measure**

- Conduct two days workshops on Microsoft Powepoint

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	6	7

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Participants will acquire/increase their knowledge and usage of Microsoft Window by 70%.
2	Participants will acquire/increase their knowledge and usage of Microsoft Word by 70%.
3	Participants will acquire/increase their knowledge and usage of E-mail by 70%.
4	Participants will acquire/increase their knowledge and usage of the Internet by 70%.
5	Participants will acquire/increase their knowledge and usage of Microsoft Excel by 70%.
6	Participants will acquire/increase their knowledge and usage of Microsoft Powerpoint by 70%.

**Outcome #1****1. Outcome Measures**

Participants will acquire/increase their knowledge and usage of Microsoft Window by 70%.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	80	90

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Some members of our community are not computer literate which can make it very difficult to acquire a job. The first step in becoming computer literate is learning MS Window.

**What has been done**

Conducted four training courses that covered MS Window, MS Word and E-mail/Internet.

**Results**

Using self-evaluation questionnaires, over 90% of participants indicated that they acquired or increased their knowledge and usage of MS Window.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

**Outcome #2****1. Outcome Measures**

Participants will acquire/increase their knowledge and usage of Microsoft Word by 70%.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	120	80

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

MS Word is one of the most widely used software for business and personal usage. Individuals who do not know how to utilize word-processing software will not be able to effectively create professional documents. Individuals who are able to effectively utilize word-processing software can save time and use it to complete other tasks.

**What has been done**

Conducted four training courses that covered MS Window, MS Word and E-mail/Internet. Also conducted two workshops that focused solely on MS Word.

**Results**

Using self-evaluation questionnaires, over 80% of participants indicated that they acquired or increased their knowledge and usage of MS Word.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
903	Communication, Education, and Information Delivery

**Outcome #3**

**1. Outcome Measures**

Participants will acquire/increase their knowledge and usage of E-mail by 70%.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2008	100	120

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Electronic mail, e-mail, is a very effective way to communicate. Using e-mail will save individuals time and money. Instead of waiting days to send documents e-mail allows it to be sent and received in a matter of minutes. It also does not cost an individual to send an e-mail.

**What has been done**

Conducted four training courses that covered MS Window, MS Word and E-mail/Internet. Also conducted three workshops that focused solely utilizing E-mails.

**Results**

Using self evaluation questionnaires, over 70% of participants indicated that they acquired or increased their knowledge and usage of E-mail.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
903	Communication, Education, and Information Delivery

**Outcome #4**

**1. Outcome Measures**

Participants will acquire/increase their knowledge and usage of the Internet by 70%.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	120	120

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The Internet, also called the information super highway, has an extensive amount of information and other resources. The Internet allows individuals to purchase needed items, pay bills, access valuable information, just to name a few.

**What has been done**

Conducted four training courses that covered MS Window, MS Word and E-mail/Internet. Also conducted three workshops that focused solely on E-mail and Internet usage.

**Results**

Using self-evaluation questionnaires, over 90% of participants indicated that they acquired or increased their knowledge and usage of the Internet.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

**Outcome #5**

**1. Outcome Measures**

Participants will acquire/increase their knowledge and usage of Microsoft Excel by 70%.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	80	60

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

MS Excel is very useful application when creating budgets, keeping track of loan payments, and a number of other useful mathematical calculations.

**What has been done**

Conducted four workshops that focused solely on the uses of MS Excel.

**Results**

Using self evaluation questionnaires, over 90% of participants indicated that they acquired or increased their knowledge and usage of MS Window.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

**Outcome #6****1. Outcome Measures**

Participants will acquire/increase their knowledge and usage of Microsoft Powerpoint by 70%.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	80	100

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

MS PowerPoint is a very useful tool to give presentations and can also be used for learning within the classroom. Individuals who utilize PowerPoint are often more captivating and engaging with their audience versus an individual who uses standard note cards.

**What has been done**

Conducted seven MS PowerPoint workshops that focused on the many uses of MS PowerPoint.

**Results**

Using self-evaluation questionnaires, over 80% of participants indicated that they acquired or increased their knowledge and usage of MS PowerPoint.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Before-After (before and after program)

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #8**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

4-H Volunteer Development and Management Program

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	10%			
802	Human Development and Family Well-Being	65%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	10%			
806	Youth Development	15%			
<b>Total</b>		100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.0	0.0	0.0	0.0
<b>Actual</b>	2.1	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
70342	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
80000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Developed 4-H web page, newsletter, materials, workshops, presentations and demonstrations that provided information about 4-H/Youth Development volunteer leadership opportunities. Set up volunteer recruitment booths at World Food Day, St. Thomas/St. John Agriculture and Food Fair, and the V.I. Agriculture and Food Fair (St. Croix). Provided orientation, training and professional development for teen and adult volunteers, partners, 4-H/Family and Consumer Sciences/CYFAR staff, and CES personnel. Utilized multi media outlets to promote 4-4/Youth Development programs to attract potential youth and adult volunteers. Facilitated youth and adult volunteers, and 4-H staff participation in annual Southern Region 4-H Volunteer Leaders' Forum, annual National 4-H Conference, and biannual National 4-H Technology Leadership Conference. Collaborated with government departments, non profit agencies, community based programs, and special interest groups to recruit, train and support 4-H volunteer development. Established a Collegiate 4-H Chapter. Worked with CES administration and 4-H leadership locally and nationally to develop 4-H Volunteer Management framework.

**2. Brief description of the target audience**

- Current and newly recruited 4-H volunteer leaders,
- Low-income, at-risk, un- or underemployed adults residing in public/federally subsidized housing communities, and CYFAR clientele
- Public and non-public high school students needing community service hours to fulfill graduation requirements,
- Clientele and staff being served through fellow UVI, CES and AES programs.
- Parents of current 4-H club members and summer program participants.
- University of the VI students,
- Youth and adults (general public) responding to multi-media 4-H volunteer campaign,
- Youth and adults indicating interest in 4-H volunteer leadership at World Food Day and fairs.
- Departments, agencies, clubs, and programs working with 4-H.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	250	2500	150	1500
2008	280	1600	160	550

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
Plan:	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of print media tools such as web pages, newsletters, brochures and fact sheets promulgated

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	2

**Output #2**

**Output Measure**

- Number of workshops, presentations and demonstrations conducted

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	25	32

**Output #3**

**Output Measure**

- Number youth and adult volunteer leaders, 4-H staff and partners trained

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	35	25

**Output #4**

**Output Measure**

- Number of partnerships, collaborations or cooperative agreements formed

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	1

**Output #5**

**Output Measure**

- Number of youth and adults volunteers and staff participated in off-island leadership development opportunities

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	15	6

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of organized 4-H clubs formed
2	Number of special interest or short-term groups formed
3	Number of organizational and infrastructure tools (policy and procedures manual, 4-H Leader's Organization, 4-H Advisory Council and Foundation) developed
4	Percentage of volunteers and staff adopting, implementing or utilizing effective leadership strategies:

**Outcome #1****1. Outcome Measures**

Number of organized 4-H clubs formed

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	5	1

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

4-H clubs provide a positive nurturing environment, positive interaction with adults and a safe place to grow, learn and experience new things as they develop into productive adults with new knowledge, skills and attitudes.

**What has been done**

Teen and adult volunteers were oriented and trained with regard to the processes and procedures required to organize a 4-H club.

**Results**

There is one school-based club and three community-based 4-H clubs on St. Croix.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #2****1. Outcome Measures**

Number of special interest or short-term groups formed

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	5	0

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Special interest groups attract youth and adults based on interest and motivation. Involvement in a special interest group often results in more formal involvement in 4-H clubs, programs and activities.

**What has been done**

Based on interest and a desire to become affiliated with 4-H, special interest groups have served as the primary strategy for some partners.

**Results**

On St. Thomas, 35 youth formed a special interest group as part of the 4-H Carnival Troupe and won 1st place. On St. Croix, one of the school partners enrolled 30 -7th & 8th graders in Robotics Special Interest Group.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #3**

**1. Outcome Measures**

Number of organizational and infrastructure tools (policy and procedures manual, 4-H Leader's Organization, 4-H Advisory Council and Foundation) developed

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	1	0

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Formal operating procedures and policies provide a framework and boundaries within which any organization should best function.

**What has been done**

Efforts have been made to collect several policy and procedural manuals from various states; however this process has not been completed. A diverse, compilation of other 4-H programs' information is the goal.

**Results**

No conclusive results to report to-date.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being

**Outcome #4**

**1. Outcome Measures**

Percentage of volunteers and staff adopting, implementing or utilizing effective leadership strategies:

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	55	56

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

The 4-H Program recognizes that effective leaders are important to the success of any group, organization or club.

**What has been done**

Volunteer leaders receive training on leadership styles, strategies and skills. As a result, they are expected to model and foster leadership in their clubs and programs.

**Results**

A total of 23 youth and adult volunteers provided leadership for four 4-H clubs and one special interest group on St. Croix and one special interest group on St. Thomas; there are a total of nine 4-H projects offered.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
802	Human Development and Family Well-Being

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals, group, organizations) and non-participants

**Evaluation Results**

Formal evaluation efforts have not been completed, mostly positive feedback from anecdotal accounts.

**Key Items of Evaluation**

**Program #9**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

A Healthy, Well-Nourished Population

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
701	Nutrient Composition of Food	20%			
703	Nutrition Education and Behavior	60%			
724	Healthy Lifestyle	20%			
<b>Total</b>		100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.0	0.0	0.0	0.0
<b>Actual</b>	2.6	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
42000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
42000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Developed culturally sensitive nutrition and health education products and resources that were made available to professionals, students, and the public. A fruit and vegetable nutrient composition poster was developed and continues to be distributed throughout the community. The poster includes the vitamin, mineral and fiber content of local vegetables and fruits; and continues to be quite popular. Conducted disease specific workshops, short courses, seminars, and other educational activities focusing on nutrition education and behavior change modification. Recruited and trained staff and volunteers to deliver nutrition, diet, and health relevant information to the community. Developed and/or obtained culturally sensitive nutrition/health curriculum appropriate for school age children at all grade levels.

- Developed and maintained relationships with partners including government agencies, clinics, places of worship, public and private schools, senior citizen centers, and day care centers.
- Developed a web page that relays information on issues relating to the program.

**2. Brief description of the target audience**

This program is directed at all U.S. Virgin Island residents. However, special attention is given to high risk groups such as residents diagnosed with diseases such as diabetes, hypercholesterolemia, hypertension, and obesity; senior citizens; and school age children.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	300	5000	350	5000
2008	1500	23500	590	300

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- a. Number of workshops, classes, and demonstrations facilitated or conducted.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	20	22

**Output #2****Output Measure**

- b. Number of volunteers recruited and trained to deliver nutrition education program.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	3	4

**Output #3****Output Measure**

- c. Number of fair-type settings in which nutrition/health information will be presented.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	8

**Output #4****Output Measure**

- d. Number of web sites developed and maintained.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**Output #5****Output Measure**

- e. Number of nutrition and health education materials developed and made available to professionals, students, and the public.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**Output #6****Output Measure**

- e. Number of partnerships with agencies and organizations that will assist in improving the health practices of U.S. Virgin Islanders.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	8	4

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of individuals who have indicated benefits from developed educational materials.
2	Percentage of adults adopting and maintaining at least one healthy lifestyle practice
3	Number of school age children learning basic nutrition information.
4	Percentage of children adopting and maintaining at least one healthy lifestyle practice.
5	Increase awareness among the general public of the relationship between food intake, physical fitness, stress management and disease prevention.
6	Number of individuals who report improvement in health status (e.g., lower blood sugar, hemoglobin A1c, and/or cholesterol level).

**Outcome #1**

**1. Outcome Measures**

Number of individuals who have indicated benefits from developed educational materials.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	50	75

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The incidence and morbidity rates of chronic diseases such as heart disease, cancer and diabetes continue to be high in the Virgin Islands. It is crucial to increase the general community's access to culturally sensitive nutrition education materials to help reduce the mortality and morbidity rates in the territory.

**What has been done**

A tropical fruit poster was produced and continues to be distributed throughout the territory. The poster utilizes a five-star scale to indicate the amount of potassium, fiber content and vitamin C in each tropical fruit.

**Results**

During fiscal year 2008, over 300 posters were distributed to various individuals and organizations.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior

**Outcome #2**

**1. Outcome Measures**

Percentage of adults adopting and maintaining at least one healthy lifestyle practice

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	60	59

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

In order to decrease the high mortality and morbidity rates from heart disease, cancer, cerebrovascular diseases, and diabetes in the U.S. VI, it is critical for Virgin Islanders to adopt and maintain healthy lifestyle practices.

**What has been done**

Six to eight-week nutrition education classes have been conducted in order to meet this goal, primarily women with young children attended the classes.

**Results**

Seventy-five percent of the participants reported a positive change in adopting at least one healthy lifestyle practice. The practices included increased consumption of fruit, vegetable, milk and grain groups.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
724	Healthy Lifestyle

**Outcome #3****1. Outcome Measures**

Number of school age children learning basic nutrition information.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2008	350	260

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

It is important to start shaping good nutrition habits at an early age, therefore the emphasis on school aged children.

**What has been done**

Basic nutrition information was disseminated to children through a series of lessons over 6-8 weeks. Some of the series were conducted in the schools as part of a school enrichment programs and the others were conducted during summer programs.

**Results**

Summer camp participants were administered a pre and post test to determine changes in knowledge regarding basic nutrition information. Fifty percent of the participants were able to answer the basic nutrition questions prior to the first lesson, however by the end of the series, sixty-five percent of the participants answered questions correctly.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #4****1. Outcome Measures**

Percentage of children adopting and maintaining at least one healthy lifestyle practice.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	50	30

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

It is critical for youth to adopt healthy lifestyle practices from an early age.

**What has been done**

Youth received information on healthy lifestyle practices through summer camp and a series of targeted sessions.

**Results**

The majority of youth reported at least one healthy lifestyle practice change as a result of the sessions.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
724	Healthy Lifestyle
703	Nutrition Education and Behavior

**Outcome #5****1. Outcome Measures**

Increase awareness among the general public of the relationship between food intake, physical fitness, stress management and disease prevention.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	5	2

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

With high incidences of preventable diseases in the territory, it is critical that the general public be informed regarding the relationship between food intake, physical fitness, stress management and disease prevention.

**What has been done**

Collaborated with local Human Services and Health Departments to conduct workshops on disease prevention.

**Results**

Participants expressed an increased awareness of the relationship of physical fitness, food intake and disease prev.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #6****1. Outcome Measures**

Number of individuals who report improvement in health status (e.g., lower blood sugar, hemoglobin A1c, and/or cholesterol level).

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	30	0

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Important to improve health outcomes in Virgin Islanders by improving blood pressure, hemoglobin A1c and cholesterol levels).

**What has been done**

Collaboration with the Health Department and Human Services in providing information sessions.

**Results**

Anecdotal results to-date.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Other (Cultural Environment)

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)

**Evaluation Results**

No data available at this time.

**Key Items of Evaluation**

No data available at this time.

**Program #10**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Basic Food Safety Education

Basic Food Safety Education

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	65%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	25%			
724	Healthy Lifestyle	10%			
<b>Total</b>		100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	0.5	0.0	0.0	0.0
<b>Actual</b>	2.7	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
25000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
25000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
82000	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

- Identified new locations to conduct classes. Recruited and trained staff and volunteers to deliver food safety information to EFNEP participants (adults and youth). Developed and/or obtained culturally sensitive food safety curriculum appropriate for EFNEP participants (adults and youth). Developed and maintained relationships with partners including government agencies, clinics, places of worship, public and private schools, senior citizen centers, and day care centers.
- Developed a web page that relays information on issues relating to the program.

**2. Brief description of the target audience**

The program targets all U.S. Virgin Islanders but especially low income individuals who are responsible for preparing the family's meal, school age children, and pregnant teens and adults.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	65	5000	200	5000
2008	80	2050	500	2050

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of 6-8 week class series conducted for EFNEP participants (adults and youth)

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	15	8

**Output #2**

**Output Measure**

- Number of volunteers recruited and trained to deliver food safety program

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	3	1

**Output #3**

**Output Measure**

- Number of fair-type settings in which food safety information will be presented

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	3

**Output #4**

**Output Measure**

- Number of web sites developed and maintained

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**Output #5**

**Output Measure**

- Number of partnerships with agencies and organizations that will assist in improving the food safety practices of U.S. Virgin Islanders

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	4	3

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of adults learning basic food safety information
2	Percentage of adults adopting and maintaining at least one food safety practice
3	Number of school age children learning basic food safety information
4	Percentage of children adopting and maintaining at least one food safety practice
5	Increase awareness among the EFNEP participants about food safety issues related to personal hygiene, food storage, food preparation, and food handling
6	Increase awareness among the EFNEP participants about food safety issues related to eating away from home (e.g., restaurants, mobile food vans, food booths) and purchasing food from street vendors (e.g., fish)

**Outcome #1****1. Outcome Measures**

Number of adults learning basic food safety information

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	65	40

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

The Virgin Islands has many risk factors for food borne illness outbreaks. These risks include the tropical climate, unpredictable power outages; and inappropriate home storage, purchasing and preparation practices. Therefore food safety education programs are needed to decrease the likelihood of food borne illnesses becoming a major health problem.

**What has been done**

Basic food safety information was disseminated through classes, demonstrations, experiential activities and lectures. Low income individuals enrolled in EFNEP were educated about the importance of proper personal hygiene, food storage, food preparation, and food handling to prevent food borne illnesses. During holidays emphasis was placed on importance of thawing meats properly and using a thermometer to check for doneness.

**Results**

Over 75% of participants correctly stated the proper methods of thawing a frozen turkey post delivery of material.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

**Outcome #2****1. Outcome Measures**

Percentage of adults adopting and maintaining at least one food safety practice

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	60	30

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

To help prevent food borne illnesses, individuals enrolled in EFNEP and those attending food safety lectures, and/or demonstrations needed to adopt and maintain at least one food safety practice, i.e. washing hands and surfaces often, avoiding cross-contamination, refrigerating food promptly and cooking food at the proper temperatures.

#### What has been done

Basic food safety information was disseminated to adults through a series of lessons over 12 weeks. Basic food safety information was also shared at fair-type activities.

#### Results

Self-report data indicates some adoption of practices learned after the conclusion of instruction.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle
703	Nutrition Education and Behavior

### Outcome #3

#### 1. Outcome Measures

Number of school age children learning basic food safety information

#### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	350

#### 3c. Qualitative Outcome or Impact Statement

##### Issue (Who cares and Why)

Because school aged youth are highly susceptible to food borne illness, effort is needed to keep children safe by teaching basic food safety information, i.e. importance of washing hands, avoiding cross-contamination, refrigerating food promptly and cooking food to proper temperature.

##### What has been done

Basic food safety information was disseminated to children through a series of lessons over 6-8 weeks. Some of the series were conducted in the schools as part of a school enrichment program and the others were conducted during summer programs. Basic food safety information was also distributed at fair-type settings through computer game play focused on food safety.

##### Results

A pre-post measure was administered to summer camp participants. Fifty-percent of youth answered queries correctly before receiving food safety information. Afterwards, eighty six percent answered questions correctly.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

### Outcome #4

**1. Outcome Measures**

Percentage of children adopting and maintaining at least one food safety practice

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	60	50

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Youth enrolled in EFNEP and those attending food safety lectures and/or demonstrations need to adopt and maintain at least one food safety practice such as washing hands and surfaces often, avoiding cross-contamination, refrigerating food promptly, and cooking food at proper temperatures.

**What has been done**

Basic food safety information was disseminated to youth through a series of 6-8 week lessons. In addition, basic food safety information was shared at fair-type settings.

**Results**

No data is available at this time.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

**Outcome #5**

**1. Outcome Measures**

Increase awareness among the EFNEP participants about food safety issues related to personal hygiene, food storage, food preparation, and food handling

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	100	40

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Individuals enrolled in EFNEP and those attending food safety lectures and/or demonstrations need to be aware of the importance of washing hands and surfaces often, avoiding cross-contamination, refrigerating food promptly, and cooking food at proper temperatures.

**What has been done**

Basic food safety information was disseminated through a series of weekly lessons and at fairs.

**Results**

Increased awareness was expressed by EFNEP participants about food safety issues related to personal hygiene, food storage and preparation, and food handling among adults and youth who attended the 6-8 week series of lessons.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

**Outcome #6****1. Outcome Measures**

Increase awareness among the EFNEP participants about food safety issues related to eating away from home (e.g., restaurants, mobile food vans, food booths) and purchasing food from street vendors (e.g., fish)

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2008	100	45

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

The territory has many risk factors for food borne illness outbreaks including the tropical climate; unpredictable power outages, street vendors with no formal food safety training. Food safety education is sorely needed to increase participants' awareness of the food safety issues that may increase their risk of getting a food borne illness.

**What has been done**

No data is available at this time.

**Results**

No data is available at this time.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
724	Healthy Lifestyle
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
703	Nutrition Education and Behavior

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Other (Cultural Environment)

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)

**Evaluation Results**

No data is available at this time.

**Key Items of Evaluation**

No data is available at this time.

**Program #11****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Marketable Skills for Limited Resource Families, Youth and Communities

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	75%			
802	Human Development and Family Well-Being	15%			
806	Youth Development	10%			
	<b>Total</b>	<b>100%</b>			

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.0	0.0	0.0	0.0
<b>Actual</b>	1.8	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
70000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
80000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

- Conducted workshops and demonstrations to promote the different FCS program offerings. Set up volunteer recruitment booths at World Food Day, St. Thomas/St. John Agriculture and Food Fair, and the V.I. Agriculture and Food Fair (St. Croix).

- Provided orientation, training and professional development for volunteers, partners, 4 H/Family and Consumer Sciences/CYFAR staff, and CES personnel.

- Utilized multi media outlets to promote FCS programs to attract potential clientele.

- Conducted workshops and short courses that help low income, at risk audiences build knowledge, skills and attitudes that will positively impact their quality of life.

- Collaborated with government departments, non profit agencies, community based programs, and special interest groups to recruit, train and support 4 H volunteer development and other program efforts.

**2. Brief description of the target audience**

- Current and newly recruited FCS participants,
- Low-income, at-risk, un- or underemployed adults residing in public/federally subsidized housing communities, and Children, Youth & Families at-Risk clientele.
- Clientele and staff being served through fellow UVI, CES and AES programs.
- Clientele referred from Department of Human Services, Department of Labor – Unemployment Office; V.I. Housing Authority- Tenant Services Office, and other agencies working with similar audiences.
- Parents of current 4-H club members and summer program participants.
- Youth and adults (general public) responding to multi-media 4-H volunteer campaign,
- Youth and adults indicating interest in FCS programs at World Food Day and fairs.
- Departments, agencies, clubs, and programs working with FCS.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	100	2500	25	750
2008	80	2700	22	550

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of short courses conducted

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	4

**Output #2**

**Output Measure**

- Number of workshops facilitated as part of "Women at the Crossroads" short course

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	25	21

**Output #3**

**Output Measure**

- Number of special interest workshops conducted

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	2	2

**Output #4**

**Output Measure**

- Number of youth, volunteers, staff and partners trained

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	120	110

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Through participation in Basic Clothing Construction Short Courses, participants will develop knowledge and awareness of sewing machine parts, basic tools and equipment, fabric line and design, measuring techniques, use of patterns, and glossary of terms
2	Through participation in Basic Clothing Construction Short Courses, participants will learn how to baste, stitch, trim and finish seam allowances using a serger, put in hems and waist bands, apply zippers, insert elastic, insert darts, and make button holes. Acquisition of these skills will allow participants to construct at least one simple outfit resulting in personal savings
3	As a result of completing the Basic Clothing Construction Short Course, 75% of participants will enroll in the Intermediate/Advanced level of this course. In addition to using basic skills developed in the basic course, participants will learn how to apply pockets and collars, put in linings, use more detailed patterns, and incorporate more difficult fabrics. Their skills and interest level will allow them to realize a savings and to use their skills to enhance their personal income by sewing for others
4	Through participation in the Crafts, Cultural Arts and Home Decorations Short Courses, participants will become aware of natural resources and recyclable items that can be used to make attractive handiwork and decorations for the home. Skills developed will include heat applications, designing of appliqués, use of adhesives, creativity and layout, project finishing, and glossary of terms
5	As a result of their training and interest in this area, participants will provide outreach to and train church, school and youth group members about the personal and financial benefits of using recycled materials
6	Through participation in Crafts, Cultural Arts and Home Decorations Short Courses, participants will learn how to construct or assemble a variety of projects that can be used to beautify the home and serve as gifts. Additional personal income will be generated through either word-of-mouth sales or by establishing their own small home-based business
7	Through "Women at the Crossroads", participants will develop knowledge of workforce preparation, personal development, personal finances, women's health and wellness issues, leadership and volunteerism
8	Through "Women at the Crossroads", participants will prepare a letter of application, build a personal resume, conduct a mock interview, complete a job application template and assemble a personal portfolio in preparation for an actual entry level employment interview
9	Through "Women at the Crossroads", participants will explore the impact that poise, personality, personal appearance, positive attitude and self-confidence have on enhancing family and workforce dynamics. As a result of their experiences, participants will select and model appropriate dress, and prepare and present a personal goals statement:
10	Through "Women at the Crossroads", participants will develop a personal budget, establish a checking account, develop a living will and explore the benefits of investing
11	Through "Women at the Crossroads", participants will learn about health issues impacting women, complete personal health screenings, identify nutritious foods and practice healthy eating habits
12	Through "Women at the Crossroads", participants will build leadership skills needed to become effective volunteer leaders
13	As a result of graduating and being certified through the "Women at the Crossroads" series, participants will successfully enter the workforce and/or improve their quality of living

**Outcome #1**

**1. Outcome Measures**

Through participation in Basic Clothing Construction Short Courses, participants will develop knowledge and awareness of sewing machine parts, basic tools and equipment, fabric line and design, measuring techniques, use of patterns, and glossary of terms

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	65	55

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Community members enhanced their skills to supplement their limited incomes and increased buying power.

**What has been done**

Provided workshops and short courses and during summer session.

**Results**

Participants expressed an interest in having more classes; some have increased income producing skills.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

**Outcome #2**

**1. Outcome Measures**

Through participation in Basic Clothing Construction Short Courses, participants will learn how to baste, stitch, trim and finish seam allowances using a serger, put in hems and waist bands, apply zippers, insert elastic, insert darts, and make button holes. Acquisition of these skills will allow participants to construct at least one simple outfit resulting in personal savings

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	25	22

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Community members enhanced their skills to supplement their incomes and increase their marketability.

**What has been done**

Staff provided workshops, short courses, summer camp and individual instruction.

**Results**

Participants continue to be eager for additional courses which can enhance entrepreneurship.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

**Outcome #3**

**1. Outcome Measures**

As a result of completing the Basic Clothing Construction Short Course, 75% of participants will enroll in the Intermediate/Advanced level of this course. In addition to using basic skills developed in the basic course, participants will learn how to apply pockets and collars, put in linings, use more detailed patterns, and incorporate more difficult fabrics. Their skills and interest level will allow them to realize a savings and to use their skills to enhance their personal income by sewing for others

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	250	80

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Community participants who enrolled in the clothing construction course increase their knowledge and skills to enhance marketability and increase self-sufficiency.

**What has been done**

Community participants who enrolled in the beginner's course moved to the intermediate/advanced level.

**Results**

Participants fulfilled requirements by completing clothing construction projects.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
801	Individual and Family Resource Management

**Outcome #4**

**1. Outcome Measures**

Through participation in the Crafts, Cultural Arts and Home Decorations Short Courses, participants will become aware of natural resources and recyclable items that can be used to make attractive handiwork and decorations for the home. Skills developed will include heat applications, designing of appliques, use of adhesives, creativity and layout, project finishing, and glossary of terms

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	35	26

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Participants made a variety of items to enhance their creative home decorating skills and income-producing capability.

**What has been done**

Participants completed all items.

**Results**

Participants requested further information and completed a variety of items.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

**Outcome #5**

**1. Outcome Measures**

As a result of their training and interest in this area, participants will provide outreach to and train church, school and youth group members about the personal and financial benefits of using recycled materials

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	150	80

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Community benefits from learning to be more energy efficient by maximizing recyclable products.

**What has been done**

Participants learned how to recycle materials and to use them in the home and greater community.

**Results**

Participants continued to request additional information to share with family and friends.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management

802	Human Development and Family Well-Being
806	Youth Development

**Outcome #6****1. Outcome Measures**

Through participation in Crafts, Cultural Arts and Home Decorations Short Courses, participants will learn how to construct or assemble a variety of projects that can be used to beautify the home and serve as gifts. Additional personal income will be generated through either word-of-mouth sales or by establishing their own small home-based business

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	300	205

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Community benefits from low-income residents who increase their incomes.

**What has been done**

Training and educational sessions were provided for participants to acquire skills to increase their income.

**Results**

Low income residents have acquired marketable skills to increase their income.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
801	Individual and Family Resource Management

**Outcome #7****1. Outcome Measures**

Through "Women at the Crossroads", participants will develop knowledge of workforce preparation, personal development, personal finances, women's health and wellness issues, leadership and volunteerism

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	45	25

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Community benefits from a better prepared workforce.

**What has been done**

Participants received workshop and individual instruction on personal development and work preparedness.

**Results**

Participants increased their ability to interview successfully and enhanced confidence and resume writing skills.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

**Outcome #8**

**1. Outcome Measures**

Through "Women at the Crossroads", participants will prepare a letter of application, build a personal resume, conduct a mock interview, complete a job application template and assemble a personal portfolio in preparation for an actual entry level employment interview

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	45	35

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Community benefits from residents being gainfully employed.

**What has been done**

Workshops, individual assistance was provided to enhance employability of residents.

**Results**

All participants completed requirements to increase their probability of self or other employment

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
801	Individual and Family Resource Management

**Outcome #9**

**1. Outcome Measures**

Through "Women at the Crossroads", participants will explore the impact that poise, personality, personal appearance, positive attitude and self-confidence have on enhancing family and workforce dynamics. As a result of their experiences, participants will select and model appropriate dress, and prepare and present a personal goals statement:

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	45	25

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Participants increase their chances for employment.

**What has been done**

Workshops and presentations conducted to better prepare residents for employment.

**Results**

All participants completed requirements to prepare for increased probability of self and other employment.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

**Outcome #10**

**1. Outcome Measures**

Through "Women at the Crossroads", participants will develop a personal budget, establish a checking account, develop a living will and explore the benefits of investing

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	30	25

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Participants establish increased self-sufficiency as they better understand personal finances.

**What has been done**

Presentations were conducted on budgeting, checking and investing possibilities.

**Results**

Residents started a checking account and expressed an interest in other financial management information.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
801	Individual and Family Resource Management

**Outcome #11**

**1. Outcome Measures**

Through "Women at the Crossroads", participants will learn about health issues impacting women, complete personal health screenings, identify nutritious foods and practice healthy eating habits

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	45	30

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Knowledge and skills relative to good nutrition practices diminishes the incidences of chronic disease.

**What has been done**

Workshops and presentations on healthy eating habits, diabetes and identification of nutritious foods.

**Results**

Most participants indicated that they now utilize healthier practices in general.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

**Outcome #12**

**1. Outcome Measures**

Through "Women at the Crossroads", participants will build leadership skills needed to become effective volunteer leaders

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	20	10

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Leadership development is important to the entire community.

**What has been done**

Young women have been exposed to the importance of good leadership skills and volunteerism.

**Results**

Some participants continue to volunteer in CES programs.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
806	Youth Development
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

**Outcome #13****1. Outcome Measures**

As a result of graduating and being certified through the "Women at the Crossroads" series, participants will successfully enter the workforce and/or improve their quality of living

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2008	45	30

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Enhanced quality of life through gainful employment impacts the entire community.

**What has been done**

Residents are experiencing more confidence in job search and related skills, especially using computer skills.

**Results**

Residents have found employment and have developed more confidence to pursue self and other employment.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
802	Human Development and Family Well-Being
801	Individual and Family Resource Management

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Other (Peer Evaluation)

**Evaluation Results**

Pre-post data instruments remain under revision and pilot testing. Anecdotal information favorable.

**Key Items of Evaluation**

Focus continued to be placed on pre/post measures, informal methods of data collection and follow-up interviews.

**Program #12**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

4-H Summer Program

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	5%			
724	Healthy Lifestyle	5%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	5%			
806	Youth Development	85%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.0	0.0	0.0	0.0
<b>Actual</b>	2.4	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
80000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
150000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
20000	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

- Conducted six-week day camp enrolling 265 youth
- Prepared appropriate curricula and gathered all materials, supplies and equipment needed to carry out objectives
- Provided computer technology, Mini-Society, sign language, Hispanic culture, sewing, mathematics, nutrition
- Provided orientation and training for summer staff and volunteers.
- Utilized multi-media outlets to promote 4-H/Youth Development programs to community. Supported summer counselors (junior and senior) /staff in implementation of selected programs.
  - Facilitated closing program to showcase program accomplishments through skits, musical selections, poetry and dance.
  - Acknowledged exemplary campers with special award.

**2. Brief description of the target audience**

- School-aged youth residing in the Virgin Islands,
- 4-H members, volunteer leaders and their parents
- Public and non-public high school students needing community service hours to fulfill graduation requirements,
- Clientele and staff being served through fellow UVI, CES and AES programs
- High school and college students seeking summer employment
- Educators interested in summer employment

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	200	2500	350	5000
2008	298	3000	770	6180

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of digital newsletters promulgated

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	8

**Output #2**

**Output Measure**

- Number of workshops, presentations and demonstrations facilitated or conducted

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	25	75

**Output #3**

**Output Measure**

- Number of parents attending workshop(s)

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	35	125

**Output #4**

**Output Measure**

- Number of teachers and students employed

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	35	60

**Output #5**

**Output Measure**

- Number of students completing/meeting community service requirements as counselors in training

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	3	6

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of children enrolled and reported on ES-237 as 4-H members in summer camp programs
2	Number of youth learning basic computer competencies
3	Number of youth building entrepreneurship skills
4	Percentage of youth adopting healthy lifestyles strategies
5	Percentage of participants constructing container or small gardens
6	Percentage of youth demonstrating leadership and life skills
7	Percentage of youth reporting an increased decision making skills reflected core character values
8	Percentage of employees reporting successful use of counselor training and experience in future employment endeavors
9	Number of youth demonstrating knowledge gained, skills learned, positive attitudes

**Outcome #1****1. Outcome Measures**

Number of children enrolled and reported on ES-237 as 4-H members in summer camp programs

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	350	265

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Enrollment data helps all entities deliver quality programs and appropriate enrollment criteria.

**What has been done**

4-H enrollment information is maintained by the state/territory's 4-H office.

**Results**

Summer program enrolled 265 youth, ages 5-14, on St. Croix and St. Thomas.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #2****1. Outcome Measures**

Number of youth learning basic computer competencies

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	200	225

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Bridging the computer divide is crucial in the 21st century. Acquisition of computer skills by youth increases their ability to compete in a global marketplace and will prepare them for more effective contributions in their future.

**What has been done**

Computer technology is offered as an educational session for all summer camp program youth.

**Results**

Computer labs developed over six weekly newsletters; all youth were exposed to the internet and e-mail skills, net etiquette and word processing. Older youth were introduced to Excel, PowerPoint and personal web pages.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

**Outcome #3****1. Outcome Measures**

Number of youth building entrepreneurship skills

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	350	360

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

One of the major goals of 4-H locally and nationally is to encourage and promote entrepreneurship.

**What has been done**

Mini-Society, an experiential entrepreneurship program of the Kauffman Foundation, is offered to all participants.

**Results**

100% of youth enrolled created at least one product or service to be sold during program's Market Day. In addition, they experienced supply and demand, created their own community, flag and money, served in a variety of leadership positions in their community and developed other entrepreneurship skills, knowledge and attitudes.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

**Outcome #4****1. Outcome Measures**

Percentage of youth adopting healthy lifestyles strategies

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	85	225

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

4-H recognizes the strong correlation between healthy, happy kids and their sense of self-worth and success.

**What has been done**

Youth participated in activities focused on healthy lifestyles specifically good nutrition practices and food safety.

**Results**

Youth participated in activities focused on healthy lifestyles specifically good nutrition practices and food safety.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
724	Healthy Lifestyle

**Outcome #5**

**1. Outcome Measures**

Percentage of participants constructing container or small gardens

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	30	55

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

4-H recognizes that gardening increases activity levels, heightens awareness of fresh, locally grown produce, and gets young people involved in hands on science, mathematics and other academic areas in a fresh and exciting way. wayway.

**What has been done**

Youth enrolled in two camp groups planned and implemented gardening components in their programs.

**Results**

All youth successfully planted over 350 vegetable seeds resulting in each person taking home seedlings to begin their home garden. Four individuals indicated that they had transplanted their seedlings.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
608	Community Resource Planning and Development

**Outcome #6**

**1. Outcome Measures**

Percentage of youth demonstrating leadership and life skills

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	75	110

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Developing life skills is the central focus of all 4-H programs as we endeavor to help youth become caring, contributing and conscientious members of their communities.

**What has been done**

All summer program volunteers and staff were trained to incorporate life skill development through experiential learning in the summer program.

**Results**

All youth enrolled had the opportunity to demonstrate or display what they learned during Parents' Day, Open House and Closing Program activities.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #7****1. Outcome Measures**

Percentage of youth reporting an increased decision making skills reflected core character values

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	75	60

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Good decision making skills are crucial to positive youth development and helping young people develop the necessary coping skills to be successful later in life.

**What has been done**

Throughout the summer program, guest speakers discussed the importance of learning refusal skills, conflict resolution strategies and sound decision making skills with focus on knowledge skills and attitudes.

**Results**

At least four youth employed conflict resolution strategies learned in the summer program to defuse potentially volatile situations on campus. Positive feedback was received by all guest speakers.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #8**

**1. Outcome Measures**

Percentage of employees reporting successful use of counselor training and experience in future employment endeavors

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	55	60

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Employment in the summer program should provide new skills and opportunities that allow employees to learn and grow professionally and personally.

**What has been done**

All counselors take part in an orientation and training program designed to prepare them for their counselor experience.

**Results**

Four counselors reported that their 4-H summer experience better prepared them for the classroom; two counselors are utilized throughout the year to conduct workshops with youth.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development
608	Community Resource Planning and Development

**Outcome #9**

**1. Outcome Measures**

Number of youth demonstrating knowledge gained, skills learned, positive attitudes

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	350	370

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Involvement in the summer program continues to provide youth with an opportunity to learn and grow in a safe, nurturing environment for six weeks during the summer.

**What has been done**

There are several opportunities during the summer program where youth can share the knowledge they have learned, skills gained and healthy attitudes developed. Youth often volunteer in other 4-H activities throughout the year.

**Results**

Program participants took part in planning and implementing programs at Parents' Day, Open House and Closing Program. Two individuals served as Masters of Ceremony and played other critical roles in the program.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Populations changes (immigration,new cultural groupings,etc.)

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #13**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

4-H/Youth Development

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	5%			
724	Healthy Lifestyle	5%			
801	Individual and Family Resource Management	5%			
802	Human Development and Family Well-Being	15%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	5%			
806	Youth Development	65%			
<b>Total</b>		<b>100%</b>			

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.0	0.0	0.0	0.0
<b>Actual</b>	2.2	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
70000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
80000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

- Supported four (4) clubs led by 23 adults and three teen leaders enrolled 215 members. Set up 4 H information booths at World Food Day, St. Thomas/St. John Agriculture and Food Fair, and the V.I. Agriculture and Food Fair (St. Croix).
- Provided orientation, training for teen and adult volunteers, and 4 H members to effectively work with club officers and program committees.
- Conducted parenting workshops to assist parents in developing nurturing relationships with their children, improving communications and supporting whole child development.
- Utilized multi media outlets to promote 4 H/Youth Development programs to attract potential youth.
- Facilitated formation of program/project development committees charged with reviewing needs assessment, prioritized program initiatives within designated interest clusters, identified potential volunteers, identified program resources, served as trainers, mentors and evaluators, and acted as 4 H program advocates.
- Collaborated with government departments, non profit agencies, community based programs and foundations, and special interest groups to support 4 H program/project development.
- Oriented, trained and utilized collegiate 4 H members and teens as vibrant, dynamic and competent leaders.
- Established a 4 H Honor Club program to encourage active involvement in all aspects of the 4 H program.
- Ensured that all 4 H units fulfilled 4 H Club Charter guidelines as promulgated by the National 4 H Office.

**2. Brief description of the target audience**

- School-aged youth residing in the Virgin Islands,
- Current and newly recruited 4-H volunteer leaders,
- Public and non-public high school students needing community service hours to fulfill graduation requirements,
- Clientele and staff being served through fellow UVI, CES and AES programs.
- Parents of current 4-H club members and summer program participants.
- UVI students,
- Youth and adults (general public) responding to multi-media 4-H volunteer campaign,
- Youth and adults indicated interest in 4-H volunteer leadership at World Food Day and fairs.
- Departments, agencies, clubs, and programs working with 4-H.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	400	2500	1500	5000
2008	490	2900	2201	6190

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Year	Target
Plan:	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of print media tools such as web pages, newsletters, brochures and fact sheets promulgated

Year	Target	Actual
2008	5	3

**Output #2**

**Output Measure**

- Number of workshops, presentations and demonstrations conducted

Year	Target	Actual
2008	25	32

**Output #3**

**Output Measure**

- Number youth and adult volunteer leaders, and 4-H members trained in club leadership, organization and management

Year	Target	Actual
2008	80	25

**Output #4**

**Output Measure**

- Number of partnerships, collaborations or cooperative agreements formed

Year	Target	Actual
2008	5	1

**Output #5**

**Output Measure**

- Number of youth participating in off-island leadership development opportunities

Year	Target	Actual
2008	5	0

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of children enrolled and reported on ES-237 as 4-H members in organized clubs, special interest or short-term projects groups and school enrichment programs
2	Percentage of units fulfilling 4-H charter guidelines and receiving official charters
3	Number of youth enrolled in special interest or short-term projects formed as a result of program development committee work groups
4	Percentage of clubs adopting, implementing or utilizing effective leadership strategies
5	Percentage increase in male enrollment
6	Percentage of youth adopting leadership and life skills
7	Percentage of clubs or units engaging in community service activities
8	Percentage of youth reporting an increased decision making skills reflected core character values
9	Number of 4-H members volunteering to serve as club officers, committee members, junior leaders or teen leaders, or advisory council representatives
10	Number of youth demonstrating knowledge gained, skills learned, positive attitudes adopted by taking part in fairs, 4-H Project Expo and other events designed to showcase individual achievement and accomplishments
11	Number of youth learning and applying principles outlined in 4-H Philanthropic Giving curricula

**Outcome #1**

**1. Outcome Measures**

Number of children enrolled and reported on ES-237 as 4-H members in organized clubs, special interest or short-term projects groups and school enrichment programs

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	500	510

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Enrollment data helps all entities deliver quality programs and meet appropriate enrollment criteria

**What has been done**

4-H enrollment information is maintained by the state 4-H office.

**Results**

There are four organized 4-H clubs on St. Croix; and one special interest group on St. Thomas enrolling 220 youth; volunteer leadership is provided by 17 adults and three teens.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #2**

**1. Outcome Measures**

Percentage of units fulfilling 4-H charter guidelines and receiving official charters

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	85	70

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The charter process helps 4-H clubs fulfill national 4-H mandates and maintains the 4-H image.

**What has been done**

Based on cultural relevance of Carnival in the Virgin Islands and the Caribbean Region, interested youth and adults formed a 4-H Carnival Troupe.

**Results**

Three community-based clubs have partially completed the charter process for the current program year.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #3**

**1. Outcome Measures**

Number of youth enrolled in special interest or short-term projects formed as a result of program development committee work groups

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	120	62

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

With leadership from interested adults, special interest groups attracted youth based on interests. This approach often leads to more formal involvement in 4-H clubs, programs and activities.

**What has been done**

Based on cultural relevance of Carnival in the Virgin Islands and the Caribbean region, interested youth and adults formed a 4-H Carnival Troupe.

**Results**

Thirty-six youth and four adults discovered the history and cultural relevance of Carnival. Their marketing, costume design and choreography skills results in a local sponsorship and 1st place in the Jr. King and Queen of the Band titles.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #4**

**1. Outcome Measures**

Percentage of clubs adopting, implementing or utilizing effective leadership strategies

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	85	70

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The 4-H program recognizes that effective leaders are important to the success of any group or club.

**What has been done**

Leadership styles, strategies and skills were emphasized during leader training; club officers also received training.

**Results**

With adult leadership, four 4-H clubs are led by a team of elected club officers who practice their leadership skills.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #5**

**1. Outcome Measures**

Percentage increase in male enrollment

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	10	20

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

In the VI, young black males continue to face many challenges to success. Involvement in positive programs such as 4-H has been proven to be a successful coping strategy that helps them meet these challenges.

**What has been done**

Specific 4-H projects that would attract males have been developed.

**Results**

The 4-H Robotics Special Interest Group was introduced at another school. Thirty-two youth enrolled; 22 were male. Male enrollment in the 4-H programs increased 3% from the previous year.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #6**

**1. Outcome Measures**

Percentage of youth adopting leadership and life skills

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	75	102

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Developing good life skills was the central focus of all 4-H programs as we endeavor to help young people become caring, contributing and conscientious members of the community.

**What has been done**

Volunteers are trained to incorporate life skill development as an integral part of club programming.

**Results**

Over 200 youth completed displays or illustrated talks, showed animals at the fair and demonstrated what they learned as a result of their involvement in 4-H.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #7**

**1. Outcome Measures**

Percentage of clubs or units engaging in community service activities

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	100	102

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Community service helps youth define and connect to their community and give back to those who support them.

**What has been done**

As a part of their yearly club plan, each club is expected to assist the local 4-H office with community service outreach projects. In addition, each club is required to plan at least one community service project.

**Results**

4-H clubs helped collected over 2,500 of food during World Food Day, provided Thanksgiving baskets to needy families, presented Christmas gifts to orphans, and picked up bags of trash at local beaches. Three new 4-H members were recruited as a result of these efforts along with one new supporter and invaluable media coverage.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #8**

**1. Outcome Measures**

Percentage of youth reporting an increased decision making skills reflected core character values

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	75	50

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Good decision-making skills are crucial to positive youth development and helping young people become competent, productive citizens.

**What has been done**

Volunteer leaders were encouraged to incorporate decision-making opportunities in their 4-H programs.

**Results**

All club members reported that they felt confident in their decision-making abilities based on educational programs included in their yearly club plan.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #9**

**1. Outcome Measures**

Number of 4-H members volunteering to serve as club officers, committee members, junior leaders or teen leaders, or advisory council representatives

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	10	25

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Program success is partially symbolized by members being willing to assume leadership roles.

**What has been done**

Youth are given opportunities to take on various leadership responsibilities with their clubs, on committees or with different extracurricular organizations or groups.

**Results**

One teen serves on the CES Advisory Council, there are three teen leaders, nine club officers and over nine teens involved in various committees within and beyond the 4-H program.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities

**Outcome #10**

**1. Outcome Measures**

Number of youth demonstrating knowledge gained, skills learned, positive attitudes adopted by taking part in fairs, 4-H Project Expo and other events designed to showcase individual achievement and accomplishments

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	250	250

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Youth participation in these events helps 4-H members bring together all the skills they have gained as a result of their involvement in 4-H programming.

**What has been done**

The 4-H office facilitated member participation in the annual VI Agriculture and Food Fair in February and World Food Day program in the fall.

**Results**

Club members successfully completed educational exhibit booth; 15 members exhibited 20 small livestock projects; 35 participated in a 4-H Carnival and Troupe and received 1st place.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families and Communities

**Outcome #11**

**1. Outcome Measures**

Number of youth learning and applying principles outlined in 4-H Philanthropic Giving curricula

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	20	0

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Philanthropy is a new project for 4-H programming and will be an exciting addition to current activities.

**What has been done**

To-date, no youth programs have addressed this topic.

**Results**

To-date, no youth programs have addressed this topic.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development
806	Youth Development

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Government Regulations
- Competing Public priorities

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

**Evaluation Results**

Evaluation continues to be revisited for the entire program. Some elements of programming are beginning pre-post measures.

**Key Items of Evaluation**

Planned evaluation includes pre/post and informal methods.

**Program #14****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Eastern Caribbean Extension Outreach and Interchange

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
603	Market Economics	10%			
606	International Trade and Development	10%			
903	Communication, Education, and Information Delivery	80%			
	<b>Total</b>	<b>100%</b>			

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.0	0.0	0.0	0.0
<b>Actual</b>	1.1	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
42000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
42000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

Professional linkages were established with other agricultural organizations in the Eastern Caribbean. Shortcourses, workshops, and training sessions were conducted for agricultural specialists, youth leaders and volunteers. Extension specialists provided consultations on food and nutrition programs, water quality and Home\*A\*Syst programs, sustainable agriculture, horticulture, and livestock production and management programs. A total of 42 crossbred boar goats were exported to the islands of Tortola, St. Martin, Anguilla and St. Eustatius through the Breeders Exchange Program. UVI/CES, in collaboration with CACHE, trained regional scientists, extension specialists, extension agents, and youth leaders in program planning and evaluation, program delivery, and technical reporting. CES assisted in the planning and execution of three international meetings for CFCS, CACHE, and CARAPA.

**2. Brief description of the target audience**

The target audience of this program will be extension specialists, extension agents, district supervisors, extension educators and research scientists in the Eastern Caribbean. Producers and farm operators will also be targeted for this program. Regional institutions, homemakers and youth will also be targeted.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	600	2000	250	1000
2008	550	2500	300	1200

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	0	0	
2008	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Agricultural linkages will be established with five organizations in the Eastern Caribbean countries.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	5

**Output #2****Output Measure**

- International and regional workshops will be coordinated.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	3

**Output #3****Output Measure**

- Proceedings, newsletters and other publications will be published for CFCS, CACHE, and CARAPA.

*Not reporting on this Output for this Annual Report*

**Output #4****Output Measure**

- Update and expand directory of individuals and institutions in agricultural research in the Eastern Caribbean.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	1	1

**Output #5****Output Measure**

- Animal breeding stock will be exchanged between countries in the Eastern Caribbean.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	30	42

**Output #6****Output Measure**

- Extension specialists will provide consultation on sustainable agriculture, horticulture and livestock production and management.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	5	7

**Output #7****Output Measure**

- Provide forum for training youth leaders and volunteers (amount of youth trained).

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2008	200	160

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Agricultural linkages established with regional organizations
2	Interantional and regional workshops coordinated
3	Amount of animal breeding stock exported to Eastern Caribbean countries
4	Directory of individuals and institutions in agricultural research in the Eastern Caribbean
5	Proceedings, newsletters and other publications published for CFCS, CACHE, and CARAPA

**Outcome #1****1. Outcome Measures**

Agricultural linkages established with regional organizations

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	5	5

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Agricultural linkages were established to strengthen collaboration between research scientists and extension professionals and agents, and to assist in the promotion and development of agriculture in the Caribbean.

**What has been done**

Meetings were held, professional networks have been established, and negotiations are being made to establish joint research between various institutions.

**Results**

There has been strong cooperation between three regional organizations in promoting agricultural development in the Caribbean. Twelve scientists have received training by participating in this program. Two regional scientists have collaborated on evaluating two new papaya species that have been developed in the Virgin Islands.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
606	International Trade and Development
903	Communication, Education, and Information Delivery

**Outcome #2****1. Outcome Measures**

Interantional and regional workshops coordinated

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	5	3

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Regional scientists, professional extension specialists and agents, and deans of agricultural universities in the Caribbean.

**What has been done**

A regional conference on agricultural development, production and marketing was conducted for eleven research scientists, professional extension specialists and agents, and youth leaders from seven Caribbean nations. These participants spent one week discussing issues focusing on agricultural development and production in the Caribbean region. There were participants from Florida, Suriname, Guyana, Barbados, Trinidad and Tobago, Dominican Republic and Puerto Rico.

#### Results

Ninety percent of the participants gained knowledge in agriculture production, development and marketing. Also, a strong network was established among the different universities participating in the conference. Eighty percent of the participants also acknowledged that they have learned to plan and evaluate programs.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
606	International Trade and Development
903	Communication, Education, and Information Delivery

### Outcome #3

#### 1. Outcome Measures

Amount of animal breeding stock exported to Eastern Caribbean countries

#### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	42

#### 3c. Qualitative Outcome or Impact Statement

##### Issue (Who cares and Why)

Livestock producers in the Eastern Caribbean who would like to improve their breeding stock.

##### What has been done

Forty-two quality breeding animals were selected from three breeding herds from the island of St. Croix and shipped to Anguilla, Tortola, St. Eustatius and St. Martin

##### Results

These animals are being used to improve the quality of breeding goats in these Caribbean countries.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
606	International Trade and Development
603	Market Economics

### Outcome #4

#### 1. Outcome Measures

Directory of individuals and institutions in agricultural research in the Eastern Caribbean

#### 2. Associated Institution Types

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2008	1	0

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Research scientists, professional extension specialists and agents.

**What has been done**

The directory of individuals and institutions in agricultural research in the Eastern Caribbean is being updated and expanded.

**Results**

This has made it easier for scientists in the Caribbean to locate other scientist or other professional individuals working on various projects in agriculture.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

**Outcome #5**

**1. Outcome Measures**

Proceedings, newsletters and other publications published for CFCS, CACHE, and CARAPA

*Not reporting on this Outcome for this Annual Report*

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}